

Annual Report 1975

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**AKZO**

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Annual meeting of stockholders to be held at the RAI Congress Center, Europaplein, Amsterdam, on Thursday, May 6, 1976, at 10.30 a.m.

## Agenda

- 1 Opening
- 2 Report of the board of management for the financial year 1975
- 3 Approval of the balance sheet and statement of income, with notes; consideration of proposal to pass the dividend
- 4 Determination of the number of members of the supervisory council
- 5 Appointment of members of the supervisory council
- 6 Change in the composition of the board of management
- 7 Annual decision concerning issues as required by the London Stock Exchange\*
- 8 Any other business

\* annually recurring agenda item in re compliance with the requirements of the London Stock Exchange concerning the listing of Akzo shares on that stock exchange

Akzo N.V. common stock is listed on the following stock exchanges:

the Netherlands:	Amsterdam
West Germany:	Frankfurt, Düsseldorf and West Berlin
Belgium:	Brussels and Antwerp
United Kingdom:	London
France:	Paris
Norway:	Oslo
Austria:	Vienna
Switzerland:	Zurich, Basel and Geneva

# Supervisory council and board of management

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## Supervisory council

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J. R. M. van den Brink, chairman  
H. M. van Mourik Broekman, deputy chairman  
P. M. H. van Boven  
P. M. van Doormaal  
H. L. Merkle  
Y. Scholten  
Mrs. K. Schudel-van Zwanenberg  
K. Soesbeek  
W. F. G. L. Starrenburg  
F. H. Ulrich  
L. Vaubel  
J. de Vries  
O. Wolff von Amerongen

## Board of management

G. Kraijenhoff, president  
S. C. Bakkenist, deputy president  
H. J. Schlange-Schöningen, deputy president  
B. Zevenbergen, deputy president  
A. G. van den Bos  
H. van Doodewaerd  
A. van Driel  
J. van den Driest  
H. Kramers  
D. W. van Krevelen  
H. J. Kruisinga  
J. Veldman  
J. A. Wolhoff  
H. G. Zempelin

Adviser: W. K. N. Schmelzer

## Secretary

A. H. M. Wentholt



## Report of the supervisory council

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At the annual meeting of stockholders held May 6, 1975, E. L. Fuller and E. F. Philipp resigned from the supervisory council, having reached the retirement age. Appreciation was expressed for their contributions to the company.

A proposal to reduce membership of the council from fifteen to thirteen was adopted at this meeting, so that no replacements were appointed.

J. R. M. van den Brink, P. M. van Doormaal and H. L. Merkle, whose terms of office had ended, were re-elected to the supervisory council.

L. H. Meerburg, senior deputy president of the board of management, retired. The meeting gratefully acknowledged the many valuable services rendered by him to the company in his long career.

At the same meeting, J. van den Driest was appointed to the board of management.

K. Soesbeek will resign from the supervisory council at the annual meeting of stockholders convened for May 6, 1976, having reached the retirement age. Stockholders will be asked to reduce the council's membership to twelve.

The terms of office of W. F. G. L. Starrenburg and F. H. Ulrich are due to end; both are eligible for re-election.

On May 6, 1976, D. W. van Krevelen will resign from the board of management, having reached the retirement age. Mr. van Krevelen was in charge of the coordination of the Group's research and development activities. Since 1969, he has notably directed the establishment and consolidation of the Corporate Research function, which he will continue to serve as a scientific adviser until the end of 1976.

Stockholders will be asked to appoint H. J. J. van der Werf to the board of management, effective May 6, 1976. Mr. van der Werf's nomination is a consequence of his appointment as president of Akzo Zout Chemie, effective January 1, 1976, as the successor to J. A. Wolhoff. Mr. Wolhoff has meanwhile taken over H. Kramers's duties as coordinator of the Group's chemical interests.

Mr. Kramers will succeed Mr. van Krevelen as president of the board of management of Akzo Research & Engineering. Within the board of management of Akzo,

Mr. Kramers will continue to be responsible for policy in regard to technological development.

With the board of management a variety of policy matters was discussed. A great deal of consideration was given to the very difficult situation of the chemical fiber industry in Western Europe and to its impact on the company.

We share the concern of the board of management about the size of last year's loss. Along with the board, we believe that, in light of the structural difficulties of part of our chemical fiber operations, rationalization measures are unavoidable. It is solely through such action, which is bound to have painful consequences for many, that a return to a balanced and profitable development of the Group can be insured, in the interest of employees, stockholders and others involved.

We herewith submit to you the balance sheet and statement of income, with notes, including the consolidated statements of the Group, prepared by the board of management for the financial year 1975. These financial statements have been examined by Klynveld Kraayenhof & Co., *Registeraccountants*. Their report appears on page 51.

We approve these financial statements, which for the financial year 1975 show a net loss, inclusive of extraordinary items, in the amount of Hfl 440 million, which has been charged against reserves.

Considering the size of this loss, we have no option but to agree to the proposal of the board of management to pass the 1975 dividend.

We propose that you also approve the financial statements, thus discharging the responsibility of the members of the board of management for their conduct of the business and of the members of the supervisory council for their supervision.

Arnhem, March 25, 1976

For the supervisory council,

J. R. M. van den Brink,  
chairman

## Financial highlights

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The figures set forth below are based on historical cost.  
For figures based on current value, see pages 46 and 47.

	1975	1974
in Hfl million		
sales	9,717	10,761
added value*	3,145	4,049
operating income (loss)	(17)	772
net income (loss) before extraordinary items	(193)	372
net income (loss) after extraordinary items	(440)	380
funds from operations**	370	1,024
property, plant and equipment		
capital expenditures	745	799
depreciation	519	531
salaries, wages and social charges (personnel costs)	3,109	3,144
stockholders' equity	2,984	3,474
common stock (par value)	592	592
common stock, in thousands of shares of Hfl 20 par value	29,594	29,594
number of employees	98,200	105,400
per share of common stock, in Hfl		
net income (loss) before extraordinary items	(6.53)	12.55
net income (loss) after extraordinary items	(14.86)	12.83
dividend	-	4.00
stockholders' equity	100.80	117.36
per employee, in Hfl 1,000		
sales	96.6	100.8
added value	31.3	38.0
personnel costs	30.9	29.5
invested capital of consolidated companies	70.9	64.9
ratios		
operating income (loss) as percentage of sales	(0.2)	7.2
personnel costs as percentage of sales	32.0	29.2
net income (loss) as percentage of stockholders' equity	(14.7)	10.9
Group equity : liabilities	0.60	0.71

\* for definition, see page 5

\*\* total of Group income (loss) and charges to income not requiring funds; see page 40

# Report of the board of management

## General review

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In 1975, the Akzo group suffered the first loss in its history. Sales decreased 10%; the net loss was Hfl 440 million. This loss comprises an amount of Hfl 250 million provided to cover rationalization costs, including additional write-offs, in respect of Enka Glanzstoff.

Most of our product groups were hard hit by the downturn in the world economy. As a consequence, the heavy loss incurred by our chemical fiber operations due to a severe slump in business for our Western European fiber companies was not offset by the results of our other product groups.

This development has highlighted our vulnerability to the effects of the business cycle. Ever since the formation of Akzo in 1969, our objective has been to adjust the Group's product mix to reduce this vulnerability. However, experience has shown that major shifts in product mix require more time than we initially supposed.

Although the 1975 recession has weakened our financial capability, it has strengthened our determination not only to implement necessary rationalization programs, but to lay even greater stress on expansion of our interests in the other product groups, such as the chemical sector.

In doing so, the financial restraint which we will have to exercise will lead to increased emphasis on cooperation with others, in Europe and elsewhere. Although this will not make management any easier, it will create scope for undertaking new projects in a situation marked by retarded growth and insufficient funds.

We have meanwhile begun implementation of drastic measures aimed at eventually restoring Enka Glanzstoff to a condition of health. The losses incurred by Enka Glanzstoff have not only been a consequence of the downswing in the business cycle, but have to a large extent been caused by structural factors. This has necessitated measures to adapt production capacities and organization to enable the company to cope with the situation in Europe anticipated for the years ahead. We regret that this must lead to a reduction of staff by over 6,000 in the plants and offices involved. Through a gradual implementation of the measures, we are striving to effectuate part of the reduction by attrition, transfers, and early

retirement of employees. Unfortunately, however, a number of dismissals will be unavoidable.

It is a keen disappointment to us that we have to propose to pass the 1975 dividend. This is the more disappointing because our stockholders – insurance companies, pension funds and tens of thousands of small investors – have for years been insufficiently rewarded as a result of the persistent inflation. However, this proposal has been prompted by the size of the loss and by the necessity to employ all available funds to restore profitability as soon as possible, and thereby to guarantee the Group's continuity.

If a group such as Akzo is to be able to make vital investments, to retain a healthy capitalization, and to adequately reward its stockholders, net income should exceed Hfl 400 million. This is in sharp contrast with 1975 results, the more so if they are recomputed on a current-value basis, as shown on pages 46 and 47.

Under today's uncertain conditions, it is extremely difficult to make a forecast for the current year. A great deal will depend on the extent of recovery of the Western European chemical fiber market. In light of the slight improvement in the situation in the initial months of 1976, we are hopeful that the Group will succeed in achieving positive results.

We wish to record with satisfaction that, despite the disappointing results and the pressure of major problems, our personnel has shown plainly that it understands its responsibility. For this, we are deeply grateful.

In this report, we aim to be as open as possible about the developments in our Group. Besides dealing with the financial side, we devote ample space to the social problems encountered in the past year. In view of the major importance of research and development to the future of the Group, these activities are highlighted in the present report. Finally, we give more attention than we did in the previous report to added value – the result of the combined action of the labor and capital factors in our organization – and to its apportionment among our personnel, the various categories of financiers, and governments.

## Added value

The payment which the Group receives for its products from its customers includes a compensation for the value added by the company through production and distribution. This added value can therefore be defined as sales less the aggregate of raw materials, supplies, energy and services purchased and used, including depreciation on property, plant and equipment. In view of their special nature, the extraordinary items have not been taken into account.

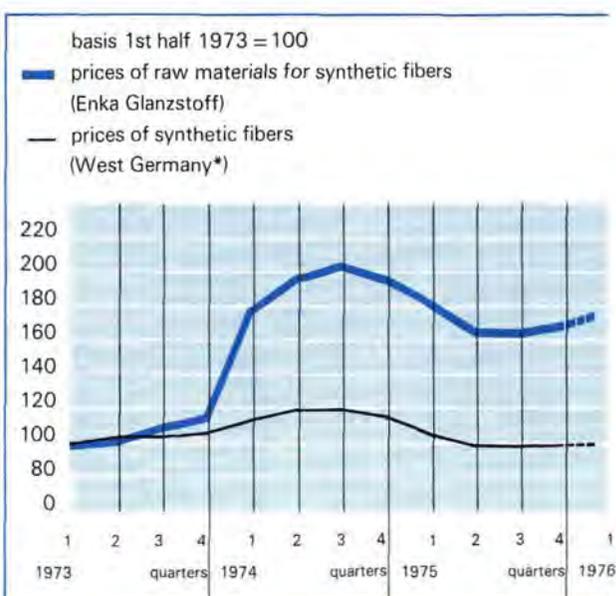
The value added by the Group in 1975 was down 22% from 1974.

in Hfl million and in %	1975		1974	
consolidated sales	9,717	100	10,761	100
raw materials, supplies, energy, purchased services, and depreciation	6,625	68.2	6,845	63.6
value added by the consolidated companies	3,092	31.8	3,916	36.4
equity in earnings of non-consolidated companies	17	0.2	45	0.4
other income	36	0.4	88	0.8
total value added	3,145	32.4	4,049	37.6

The amount of raw materials, supplies, energy, services and depreciation was down 3% to Hfl 6,625 million; this reduction was proportionately less than the drop in sales (10%).

This reflects three developments:

- purchase prices of raw materials for chemical fibers and



\* Source: Statistisches Bundesamt

chemical products on the average did not go down nearly as much as selling prices of the Group's products;

- the cost of energy increased substantially;
- low capacity utilization levels in the majority of chemical fiber and chemical product plants in 1975 increased the pressure from depreciation and other fixed costs.

### Shares in added value

in Hfl million and in %	1975		1974	
employees	3,109	98.8	3,144	77.7
providers of loans	270	8.6	235	5.8
governments	(54)	(1.7)	230	5.7
stockholders				
Akzo N.V. stockholders	-		118	
minority stockholders	21		26	
	21	0.7	144	3.5
	3,346	106.4	3,753	92.7
added to (deducted from)				
Group equity	(454)		304	
of which for extraordinary items	(253)		8	
	(201)	(6.4)	296	7.3
total	3,145	100	4,049	100

1975 personnel costs shown opposite the item 'employees' in the table aggregated Hfl 3,109 million (including social charges), or 99% of added value. This abnormally high percentage was caused by the steep reduction in added value, and by the fact that, despite the decrease in the number of employees, personnel costs remained approximately equal as a result of a 5% increase in personnel costs per employee from an average of Hfl 29,500 in 1974 to an average of Hfl 30,900 in 1975.

A major element in the 15% rise in interest paid was the fact that further borrowings were undertaken.

The item 'governments' in the table shows a negative amount for 1975 income taxes, due to substantial losses, chiefly in the Netherlands and West Germany. From these losses, taxes were deducted to the extent that they could be offset against taxes charged to income in previous years.

Subject to acceptance of our pertinent proposal, no dividends will be paid to Akzo N.V. stockholders. Minority stockholders of certain - predominantly foreign - Group companies were paid dividends in the aggregate amount of Hfl 21 million (1974: Hfl 26 million).

## Products and geographical distribution

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The development of consolidated sales is shown below:

in Hfl million and in %	1975		1974		1969	
chemical fibers for:						
textile uses	2,880	30	3,386	32	2,746	43
industrial uses	827	8	1,142	11	580	9
	<u>3,707</u>	<u>38</u>	<u>4,528</u>	<u>43</u>	<u>3,326</u>	<u>52</u>
chemical products						
salt and heavy chemicals	1,428	15	1,653	15	627	10
specialty chemicals	824	8	991	9	315	5
coatings	836	9	772	7	340	5
	<u>3,088</u>	<u>32</u>	<u>3,416</u>	<u>31</u>	<u>1,282</u>	<u>20</u>
other products						
pharmaceuticals	971	10	819	8	374	6
consumer products	779	8	679	6	747	12
miscellaneous products*	1,172	12	1,319	12	637	10
	<u>2,922</u>	<u>30</u>	<u>2,817</u>	<u>26</u>	<u>1,758</u>	<u>28</u>
total	<u>9,717</u>	<u>100</u>	<u>10,761</u>	<u>100</u>	<u>6,366</u>	<u>100</u>

\* including plastics, technical products, leather, and various industrial products

Shipments of *chemical fibers* fell 13% compared with 1974. On the average, selling prices decreased 5%, including the effect of changes in exchange rates. For Enka Glanzstoff's chemical fibers, the price drop averaged 8%; consequently, prices of most products dropped to the level existing before the oil crisis in 1973 or even below that level.

Hardest hit were the *textile filament yarn and staple fiber* operations of our EEC-based fiber companies. The simultaneous occurrence of the general economic recession and the textile crisis especially affected shipments of polyamide (nylon) textile yarns and of staple fibers. Toward the end of the year, Enka Glanzstoff and British Enkalon showed a modest recovery. Earlier and stronger improvements in shipments were recorded for American Enka and La Seda de Barcelona. No significant upturns in selling prices materialized, however, least of all in Western Europe.

Our *industrial yarns* also experienced a decrease in shipments. However, in the fourth quarter, shipments in this sector showed a distinct recovery but, with the exception of a slight rise for rayon yarn, selling prices failed to improve.

Despite the disappointing developments in 1975, we succeeded in maintaining our market position for chemical fibers, including that in Western Europe.

In the *chemical products* sector, our *salt and heavy chemicals* suffered a substantial decline in shipments. Overall, the attendant drop in selling prices was limited. Meanwhile, business has shown a distinct, if still modest, recovery. The maintenance of our strong competitive position in northwest Europe will depend in part on the development of energy costs, which continue to rise steeply, notably in the Netherlands.

With few exceptions, our *specialty chemicals* suffered the effects of reduced demand for process chemicals, additives and other auxiliaries on the part of the petroleum, petrochemical and plastics industries. Contrary to the situation in the United States, business in Europe had not shown any substantial recovery at year's end.

Sales of *coatings* were up compared with 1974. For some product classes, such as do-it-yourself products and auto refinishes, we succeeded in improving our position in several countries.

The contributions to the continued growth of sales of our *pharmaceuticals* product group came from ethical drugs (Organon), hospital supplies (Organon Teknika) and pharmaceutical raw materials (Diosynth). The sales gain for our *consumer products* was due in part to the acquisition of Recter B.V. Growth of sales was restrained by price controls in several countries. Of our *miscellaneous products*, plastics, wire and cable products (Brand-Rex) and synthetic leather were appreciably affected by the recession, which caused a drop in sales.

Breakdowns of consolidated sales by area of destination and by area of origin are presented in tables A and B. Sales to the EEC countries declined from Hfl 5,646 million in 1974 to Hfl 5,177 million in the year under review. Nevertheless, the share of this area in total Group sales remained constant (53%). In 1975, the Netherlands and West Germany maintained their position as the Group's principal exporters.

Table C presents a geographical breakdown of invested capital of consolidated companies. Since 1969, shifts in the geographical pattern of invested capital have been minor. In 1975, the capital invested in our consolidated companies in the Netherlands and West Germany was Hfl 4,178 million, or 60% of the Group's total invested capital (1974: Hfl 4,124 million - likewise 60% of total).

Table D lists the number of employees of consolidated companies by area of establishment.

	sales by area of destination			
	1975		1974	
the Netherlands	1,218	12	1,302	12
West Germany	1,939	20	2,115	20
other EEC countries	2,020	21	2,229	21
total EEC countries	5,177	53	5,646	53
rest of Europe	1,432	15	1,531	14
total Europe	6,609	68	7,177	67
North America	2,018	21	2,318	21
rest of the world	1,090	11	1,266	12
total	9,717	100	10,761	100

	sales by area of origin			
	1975		1974	
the Netherlands	3,237	34	3,554	33
West Germany	2,547	26	2,819	26
other EEC countries	994	10	1,124	11
total EEC countries	6,778	70	7,497	70
rest of Europe	685	7	691	6
total Europe	7,463	77	8,188	76
North America	1,909	20	2,163	20
rest of the world	345	3	410	4
total	9,717	100	10,761	100

	invested capital*			
	Dec. 31, 1975		Dec. 31, 1974	
the Netherlands	2,417	35	2,268	33
West Germany	1,761	25	1,856	27
other EEC countries	503	7	595	9
total EEC countries	4,681	67	4,719	69
rest of Europe	500	7	475	7
total Europe	5,181	74	5,194	76
North America	1,543	22	1,392	20
rest of the world	239	4	250	4
total	6,963	100	6,836	100

\* Group equity plus long-term liabilities.

	employees			
	Dec. 31, 1975		Dec. 31, 1974	
the Netherlands	29,700	30	30,600	29
West Germany	26,000	26	28,800	27
other EEC countries	13,400	14	14,700	14
total EEC countries	69,100	70	74,100	70
rest of Europe	7,800	8	8,100	8
total Europe	76,900	78	82,200	78
North America	16,100	16	17,100	16
rest of the world	5,200	6	6,100	6
total	98,200	100	105,400	100

To illustrate the growing importance of the Group's non-consolidated companies, 1975 sales, as well as invested capital and personnel strength at December 31, 1975 of these companies are presented in table E.

	sales*	invested capital	employees
EEC countries	1,050	520	6,500
rest of Europe	230	180	1,700
total Europe	1,280	700	8,200
North America	40	10	100
rest of the world	640	630	10,200
total	1,960	1,340	18,500

\* by area of origin

In percentages, the geographical breakdown of sales of non-consolidated companies is as follows: EEC countries 54%, rest of Europe 12%, North America 2%, rest of the world 32%. By product category, the breakdown is: chemical fibers 47%, chemical products 39%, other products 14%.

Aggregate 1975 sales to third parties of all consolidated and non-consolidated companies were Hfl 11,600 million; at December 31, 1975 total invested capital was Hfl 8,300 million and the total number of employees was 116,700.

## Readjustment and innovation

The year under review unfortunately was marked by rather drastic decisions and measures aimed to restore to health certain sections of the chemical fibers product group. Within Enka Glanzstoff, capacities for rayon staple, rayon textile filament and polyamide (nylon) textile filament will be reduced. This will result in a reduction of employment at shopfloor level while, in addition, the personnel strengths of central and plant offices will have to be scaled down to reflect the new situation.

At January 1, 1976, the Belgian government acquired a majority interest in our Fabelta fiber operations.

In the face of the textile crisis, British Enkalon had to bow to the necessity of vigorous cost-cutting measures. Measures taken by American Enka (Akzona) included the discontinuation of production of rayon textile filament and

industrial rayon yarns, which had become structurally unprofitable.

In all segments of the Group that were affected by the recession, steps were taken or are in preparation to create conditions for an early recovery.

As a consequence of the substantial reduction in funds from operations, a great many projects included in the 1975 investment program had to be postponed. Authorizations of expenditures for property, plant and equipment of consolidated companies totaled Hfl 364 million (1974: 1,275 million).

In addition, execution of a number of projects authorized prior to 1975 was postponed. Among the items affected were the Indonesia chemical fiber project, the Armira (Akzona) synthetic leather plant, expansion of

acrylic staple manufacturing capacity at Enka Glanzstoff, and several other projects.

To counter loss of employment as effectively as possible under the exceptional conditions of the recession, we secured the partnership of government agencies in a few projects in the Netherlands and Belgium.

Projects approved in the year under review included the following major ones:

**total project cost**

- Capacity expansion of the Delfzijl (Netherlands) soda plant by 60,000 metric tons to 400,000 metric tons per annum. **Hfl 30 million**
- Establishment at Delfzijl, jointly with DSM, of a second methanol plant of roughly the same capacity as the first (350,000 metric tons per annum). **Hfl 140 million**
- Establishment, jointly with Toyo Soda Manufacturing Company Ltd (Japan) and N.V. Noordelijke Ontwikkelingsmaatschappij, of an ethylene diamine plant at Delfzijl, capacity 15,000 metric tons per annum. **Hfl 75 million**  
This plant will turn out basic chemicals for the manufacture of fungicides and other products.
- Construction, jointly with Nationale Investeringsmaatschappij N.V., of a nitrogen derivatives plant at Mons (Belgium) with a capacity of about 30,000 metric tons per annum. **Hfl 100 million**  
The nitrogen derivatives in question are surface-active agents used in the detergent and other industries.
- Expansion of the peroxides production capacity at Mons. **Hfl 20 million**  
Peroxides (initiators) are typically used in the manufacture of plastics.

We will have to contribute approximately Hfl 100 million from company funds toward the financing of these projects, which concern both consolidated and non-consolidated companies.

The number of jobs created by these projects is limited, namely 335 (capital cost per job in excess of Hfl 1 million).

Capital expenditures for property, plant and equipment of consolidated companies were Hfl 745 million in 1975 (1974: Hfl 799 million).

The following table illustrates the percentage breakdown by main product group and by geographical area.

*In the spring of 1976, Edet Nederland of Tilburg (Consumer Products division) will start up a new paper-making machine for the production of tissue paper.*

	1975	1974	1973
capital expenditures for property, plant and equipment in Hfl million	745	799	549
<i>main product groups</i>			
chemical fibers	42%	60%	48%
chemical products	37%	24%	34%
pharmaceuticals, consumer products and miscellaneous products	21%	16%	18%
<i>geographical areas</i>			
Europe	75%	72%	70%
North America	18%	21%	22%
rest of the world	7%	7%	8%

1975 expenditures were predominantly for projects authorized in previous years. It should be noted that most expenditures for our fiber operations in Western Europe and the United States were for purposes other than capacity increases. In the next few years, the share of chemical fibers in capital expenditures is anticipated to continue to decline.

1975 expenditures for investments in non-consolidated companies and for acquisitions were Hfl 99 million (1974: Hfl 88 million). A portion of these expenditures concerned our share in the construction cost of the Cobafi nylon tire yarn facility (Brazil) and our participation in Nichemtex Industries (Nigeria). Nichemtex Industries is to build a production unit for polyester textile filament yarn.



## Social policy and developments

### Employment

As a result of the economic depression, 1975 was a year of anxious uncertainty for many of our employees. For a number of them, the consequences were drastic, taking the form of relocations within the Group or even of terminations.

To the extent that an economic downswing is cyclical and hence temporary, the consequences for labor will remain limited. This is especially true in countries where social insurance programs help absorb the effects of necessary temporary cutbacks in operations. In 1975, we used such facilities in implementing short-time working programs in varying degrees in our fiber, chemical and coatings operations in the Netherlands, West Germany, Belgium and Austria.

In this way, dismissals can be avoided by drawing from funds to which industry, and often labor itself, have contributed.

If short-time working programs are not possible, different measures are unavoidable. In the United Kingdom, for instance, we resorted to a restriction of overtime; in the United States, employees were laid off temporarily. Meanwhile, temporary layoffs have also been effected in the United Kingdom and the Republic of Ireland.

However, if overcapacity is structural, temporary solutions are of no avail. Under such conditions, the sole option is permanent curtailment of operations. In 1975, we were confronted with such a situation for Enka Glanzstoff and Akzona.

Notably in northwest Europe, the structural problems in the chemical fiber sector have existed for several years. In the past few years, attempts were made to solve the capacity problems through the development of a European industrial policy; however, these attempts were unsuccessful.

In 1972, the structural improvements Enka Glanzstoff sought to achieve could not be effected.

However, the extremely heavy losses suffered by our chemical fiber operations in 1975 now necessitate far-reaching measures to prevent other, healthy segments of the Group from being imperiled. A concomitant of inadequate development opportunities for healthy manufacturing operations is that jobs will also be jeopardized in sectors outside chemical fibers. A recovery of the Group's profitability is thus not only an economic requisite, but a social necessity as well.

We are aware of our social position as a provider of employment, not only for our own personnel but also for many who are not on our payroll but whose jobs depend in part on our activities.

This is a factor which is given due weight in our

investment policy. When we establish an operation in a country or region, we do so to stay and not to withdraw after some time. Any corporation will attempt to prevent destruction of capital; by the same token, any corporation will turn every stone to prevent disposal of its social assets, i.e. its personnel.

However, despite strenuous efforts, no corporation can guarantee the economic security of its workers under all conditions, since the success of its operations hinges to a considerable extent on external factors beyond its control, such as changes in the pattern of demand, the development of new products, fluctuations in exchange rates and other factors relating to the cost of production, which affect its competitive power. Corporations, however large, are no more capable than are national governments of foreseeing all developments and of providing for all contingencies.

To us, it is only natural that large corporations, when forced to curtail or terminate certain operations, should explore all possibilities for the creation of alternative employment. Under normal conditions, i.e. if return on invested capital is adequate, they will usually succeed in creating alternative or new employment through investments in expansion. A more difficult situation arises if a company is confronted, as we were, with a moderate development of results in the period 1969-1974 and with heavy losses in 1975. In such cases, the scarce funds available must be used primarily for existing operations and are inadequate to finance investments to counter a substantial decrease in employment at short term. In this context, reference is made to page 8, where it is seen that for a number of planned chemical facilities in the Netherlands and Belgium capital cost per job is in excess of Hfl 1 million.

Even when earning capacity recovers, it will not be feasible in the regions affected to create alternative employment through the establishment of new operations providing full compensation for the present loss of jobs. This is true of the Netherlands in particular, and of West Germany, two countries where high levels of wage costs and strong currencies severely limit export opportunities.

In the year under review, the number of employees of the Group decreased to 98,200 at December 31, 1975. The largest decrease was recorded for Enka Glanzstoff, whose work force was reduced by 4,200. The reduction in the number of employees will continue in 1976.

### International consultations

It is a mistaken view to assume that economic setbacks lead to diminished concern for social policy in industry. Nevertheless, it is a view frequently expressed in political and trade union circles.

In this context, the events in regard to the consultations on Enka Glanzstoff's problems are illustrative of today's social climate and of its possibilities as well as its difficulties.

The elected representatives of our personnel (works councils), especially in the Netherlands, but also in West Germany and Belgium have, of course, thoroughly studied the analysis of Enka Glanzstoff's problems and the consequent rationalization plan and have contributed to its finalization.

Major employee interests were (and are) at stake. We are thankful that the consultations have in the main been constructive, and that the works councils in the various countries decided to share in the responsibility for these – admittedly quite drastic – measures. This fruitful experience in our dealings with the works councils heightens our disappointment over the laborious course of consultations with certain important trade unions.

In all candor we wish to state that we are deeply concerned over the fact that, in the Netherlands, two trade unions have withheld constructive cooperation on the Enka Glanzstoff rationalization plan, and continue to do so at this writing.

The talks took more than six months. With the loss of Enka Glanzstoff amounting to Hfl 30 million a month, this is evidence enough that we set great store by meaningful consultation and that, in order to achieve this goal, we were willing to pay a high price.

We are utterly convinced – and the reactions from our personnel bear us out – that we went to the extreme limit in terms of time and sheer bulk of information, about Enka Glanzstoff as well as Akzo, expended on the consultations.

The negative reactions from the trade unions culminated in a demand by certain unions for international consultations with Akzo. At the time this demand was made, three international meetings had already been held, at Enka Glanzstoff's invitation, with all Dutch, German and Belgian unions representing members in the problem plants. Based in part on our sadly disappointing experience with these talks, we then decided to break off further international consultations.

The failure of this experiment in transnational consultation with national trade unions on a highly concrete set of problems has established the need for well-defined rules by which all parties must abide. Our experience also provides a warning against premature moves to create permanent international or European structures for consultation with employee representatives, all the more so if such moves are undertaken on the basis of ideological concepts, with no prospect of their being in any way useful to all parties concerned.

In order to have effective talks on a level transcending the frontiers of any one country, it is necessary to have a

coherent and knowledgeable trade union agency as well as adequate national modes of consultation. In the absence of grassroots contacts with the workers in the plants, consultations on the international level are an empty form. Moreover, in the absence of adequate liaisons between the trade unions, the barriers to communication – which are formidable enough in and of themselves due to linguistic and other differences – become insuperable.

It should also be remembered that the labor relations and consulting structures that have evolved over the years in the Netherlands, West Germany and Belgium do not reflect the situation in other countries.

For these reasons, only cautious experiments of limited scope in transnational consultation should be considered for the near future.

### Multinationals

Economic recessions are often accompanied by an intensification of pressure for social change. Multinational corporations are expected to be leaders in social development. In view of the knowledge pooled in big corporations, this is an understandable and reasonable expectation.

By and large, we venture to assert, this expectation is being honored by the multinational corporations. The other side of the coin is, of course, that those who break new ground are liable to go astray from time to time. This may be one reason why multinational corporations are open to so much criticism internationally.

There is hardly any country where this criticism is so harsh and biased as in the Netherlands, Akzo's home base. Traditionally, the Netherlands was an attractive location for multinational corporations, not only because of its geographical position, and its system of State provisions – including educational facilities – but also on account of its labor climate and fiscal regime. Indeed, this country is the domicile of a relatively large number of multinationals, among them several big ones. Prosperity and employment in the Netherlands are highly dependent on successful export activities of these corporations. It is therefore all the more strange that, in this very country, people should be so vocal in their criticism, unless it is this very dependence that evokes emotional resistance.

Similar frustrations may perhaps explain in part why the achievement of international, and notably European, solidarity is taking so long. In this area, too, there is continual resistance against international political decisions which are not subject to national controls. The abolition of various national border lines within Europe has contributed to free expansion of international movement of goods and services, and to a substantial

increase in prosperity in the EEC member states and associated countries.

At the same time, many feel uncomfortable with such bewildering size and retain a yearning for their national homesteads.

The large corporations, having long achieved integration in an international environment by virtue of their international structure, naturally experience similar restraining influences.

Progress toward truly international relations will be fitful for many years to come. Rules will have to be

evolved to control and stimulate such progress.

The Organization for Economic Cooperation and Development (OECD), whose membership includes the principal industrialized nations, has been making good progress toward the formulation of an international code of conduct, which may make a useful contribution in this regard.

The practical significance of the code would be heightened if the reciprocal rights and obligations of all parties – multinationals, governments and trade unions – are set forth.

## Financials

### Results

The difficulties encountered by the Group in 1975 are reflected in the figures set forth below.

in Hfl million	1975	1974
sales	9,717	10,761
operating income (loss)	(17)	772
net income (loss) before extraordinary items	(193)	372
net income (loss) after extraordinary items	(440)	380

The Hfl 130 million provision made at December 31, 1974 to cover special risks entailed by the high year-end inventory level was added in its entirety to 1975 operating results. As a consequence, the net loss was reduced by Hfl 67 million.

The effect of price rises on operating income (loss) and net income (loss) before extraordinary items is shown on page 47.

In view of the rationalization measures at Enka Glanzstoff, we have made a provision in the amount of Hfl 250 million, which has been included in the statement of income as an extraordinary item. This provision is intended to cover additional write-offs on property, plant and equipment, costs of early retirement and other staff reductions, and costs of relocations of equipment and personnel.

The decline in sales and results, which first affected chemical fibers in the latter half of 1974, gradually spread to most of the other product groups in 1975. This necessitated cutbacks in production and caused high under-capacity operation losses in the capital-intensive sectors of the Group. In addition, falling demand resulted in price drops for a great many products.

The development of operating results of consolidated companies by main product group was as indicated below.

in Hfl million and in % of sales	1975		1974	
chemical fibers	(326)	(8.8)	223	4.9
chemical products	80	2.6	317	9.3
pharmaceuticals,				
consumer products and				
miscellaneous products	229	7.8	232	8.2
total	(17)	(0.2)	772	7.2

The operating loss for the chemical fibers sector was solely due to losses suffered by Enka Glanzstoff and British Enkalon.

Exceptionally high losses were incurred on *textile filament yarns and staple fibers* produced by our chemical fiber operations in the EEC countries; these losses continued to be acute in the second half of 1975, although demand firmed up.

Initially, results of our fiber operations outside the EEC were likewise negative. However, an upturn in shipments beginning in mid-year compensated for the initial operating losses and enabled these companies to achieve positive results for the year of 1975 as a whole.

*Industrial yarns*, mainly an Enka Glanzstoff product line, were perceptibly affected by the recession but demand picked up sufficiently in the second half of 1975 for year-end operating results to be positive.

Results for *salt and heavy chemicals* and *specialty chemicals* gradually declined in the course of the year. For Akzo Chemie's specialty chemicals this decline was so substantial as to cause an operating loss. Operating income from *coatings* was down compared with 1974.

*Pharmaceuticals* and *consumer products* hardly experienced the pinch of the recession. Pharmaceuticals even continued their favorable development. In the case of

consumer products, however, operating income was under pressure from increased raw materials costs (cellulose) and price controls. In the sector of *miscellaneous products*, results for plastics and wire and cable products were noticeably depressed by the recession.

The breakdown of operating results by area of establishment of consolidated companies is as follows:

in Hfl million and in % of sales	1975		1974	
EEC countries	(187)	(2.7)	474	6.3
rest of Europe	10	1.4	68	9.8
Europe	(177)	(2.4)	542	6.6
North America	103	5.4	166	7.7
rest of the world	57	16.5	64	15.6
total	(17)	(0.2)	772	7.2

The size of the losses suffered by Enka Glanzstoff and British Enkalon was so large as to cause an overall operating loss for our EEC-based operations as a whole.

### Financing

In 1975, funds from operations totaled only Hfl 370 million, versus Hfl 1,024 million in 1974. However, capital expenditures were only slightly lower than in 1974 as a result of payments with respect to projects started in previous years.

Long-term borrowings in the aggregate amount of Hfl 826 million (1974: Hfl 422 million) were undertaken to cover the financing deficit. Interest on medium and long-term borrowings arranged in 1975 averaged 9.1% (1974: 10.5%).

The table below illustrates financing in 1975 and 1974.

in Hfl million	1975	1974
working capital at January 1	2,339	2,226
funds from operations	370	1,024
investments, including acquisitions,		
less disposal of participations	(791)	(877)
increase in borrowings	549	116
dividends	(21)	(72)
other changes	(5)	(78)
working capital at December 31	2,441	2,339
of which cash and marketable securities	539	524

Inventories decreased Hfl 449 million. For the other changes in working capital, see page 40.

On balance, working capital increased Hfl 102 million.

For 1976, our aim will be to keep capital expenditures within the limits of funds from operations.

If the level of shipments and production should go up in 1976, an increase in working capital needs must be expected. If necessary, the pertinent capital requirements can be satisfied from the – largely medium-term – credit facilities that are open to us internationally. At December 31, 1975, a total of over Hfl 1,100 million was available under these facilities.

### Composition and financing of assets

in Hfl million and in %	Dec. 31, 1975		Dec. 31, 1974	
non-current assets	4,828	51	4,782	49
current assets	4,609	49	4,973	51
total	9,437	100	9,755	100
financed from:				
Group equity	3,525	37	4,039	42
long-term liabilities	3,745	40	3,082	31
current liabilities	2,167	23	2,634	27
total	9,437	100	9,755	100
Group equity : liabilities	0.60		0.71	
Group equity : non-current assets	0.73		0.84	
current assets : current liabilities	2.13		1.89	

The decrease in Group equity as a result of the 1975 loss, and the increase in long-term liabilities, caused the ratio of Group equity to liabilities to decline from 0.71 at December 31, 1974 to 0.60 at December 31, 1975. Improvement of this ratio is among our top priorities. This will, of course, require a distinct recovery of results.

### Insurance

Buildings, machinery, equipment and inventories are insured against damage by such contingencies as fires, explosions, etc. Certain of these insurances provide for a deductible of limited extent. The insured value of property, plant and equipment is almost entirely based on reinstatement value, and was Hfl 15,600 million at December 31, 1975.

The further effects of these contingencies are covered by consequential loss insurances. These and other insurances are regularly adjusted to the size of the risks concerned.

## Safety and the environment

*Daphnia magna* (water flea) is highly sensitive to toxic substances in waste water and is used by our pollution control laboratory for the determination of toxicity levels in industrial effluent.

Worker at Fibras Químicas (Mexico) receiving shipment of DMT – the principal intermediate for polyester – wears prescribed protective suit. The liquid DMT being handled has a temperature of approximately 150°C.

In recognition of our difficult financial position, we were forced to adjust the program for environmental projects.

In early 1975, starting-points and guidelines for a longer-range approach to safety and environmental matters were formulated in consultation with divisions and Group companies. On that basis, a large number of Group plants produced an inventory of data on the safety and environmental situation anticipated for the next three years; subsequently, plans for review and improvement were drawn up. One benefit of the availability of this data is that it is now possible to ascertain both earlier and more concretely what effects expansion or modernization of operations will have on environment and safety. Planning for a longer term should also help create better opportunities of early communication with all parties involved.

In the area of industrial safety, we have taken steps to evolve methods for the analysis of hazards associated with our chemical processes. Armed with these methods, we will be able to subject those of our chemical plants for which this is relevant to a safety analysis which should permit us to enhance our control over the risks to personnel and to people residing in the proximity of these plants.

We continue to give constant attention to fostering watchfulness and a sense of personal responsibility in management and labor. This remains the best guarantee for active local safety and environmental policies. In the year under review, several new officers were appointed at

divisional and plant level, who are currently being introduced to the problems and equipped for their duties, through such means as in-house training courses.

Also in 1975, a study was completed assessing our Dutch operations' future ground-water and city-water requirements. It was shown that over the long term an increase in manufacturing activities need not equate with higher water requirements, provided that consumption is monitored even more strictly and opportunities for re-use are further exploited. Minimizing water use has been adopted as a target by the majority of our plants.

With regard to the safety of our products for employees, processors and consumers, we broadened the scope of our activities through the formation of a working group made up of specialists in the field of toxicology. This working group is to issue recommendations, in the very infancy of new products and processes, on their effects on occupational hygiene, product safety and environmental hygiene.

Jointly with other enterprises, programs were set up aimed at a systematic screening of a range of substances to detect carcinogenic or other long-term harmful effects. Extensive medical examination of personnel of our vinyl chloride monomer plant did not reveal pathological conditions that might be attributed to exposure to vinyl chloride gas. Regular measurements in the year under review again showed that the vinyl chloride concentration in the plant's atmosphere is far below the official tolerance limit.



*Protective clothing from colorful PVC-coated Enkalon® Superfest fabrics is eminently suited for use at work and in outdoor sports.*

## Chemical fibers

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This main product group includes filament yarns and staple fibers from polyamide, polyester, polyacrylonitrile (staple) and cellulose. It further comprises non-wovens and steel cord.

Uses, both textile and industrial, include:

apparel, carpeting and other home furnishings and household textiles;

auto tires, conveyor belts, safety belts, fishing nets, ropes, building and construction materials.

The worldwide decline in chemical fiber production in 1975 is especially evident in the production statistics of the Western European fiber companies.

World chemical fiber production  
(in millions of metric tons  
and in %)

	1975		1974		1973	
Western Europe	2.6	25	3.2	28	3.4	29
United States	3.0	29	3.3	29	3.5	30
Japan	1.4	13	1.6	14	1.8	16
rest of the world	3.4	33	3.2	29	2.9	25
total	10.4	100	11.3	100	11.6	100

The rate of fall in chemical fiber production in the industrialized nations quickened from mid-1974. By contrast with the United States and – to a lesser degree – Japan, where general business conditions improved perceptibly as early as in the second half of 1975 and where output of chemical fibers resumed its upward trend, a significant recovery failed to materialize in Western Europe.

Although the capacity utilization levels of the Western European fiber industry improved in the latter half of the year, they remained far from normal, partly owing to structural overcapacity for several classes of textile filament and staple.

### The Western European textile and apparel industry

In Western Europe, and more particularly in West Germany and the Netherlands, developments of a structural nature have placed the textile and apparel industry in a difficult position. This has added to the delay in a significant recovery of chemical fiber production. Although the rationalization measures now being implemented by Enka Glanzstoff should reduce our dependence on these markets, the future development of the textile and apparel industry in Western Europe will continue to have a major impact on our position as a raw materials supplier. This is all the more true because it is unlikely that we will find ourselves in the same strong export position we enjoyed in previous years.

A favorable factor is the near-stability of the percentage of consumer income – about 9% in Western Europe – that, on a constant-price basis, is being spent on apparel. In spite of this, the relative importance of the textile and apparel industry declined, certainly in respect to employment. Its aggregate workforce in the Netherlands and West Germany suffered a 30% reduction to slightly more than 700,000 over the period from 1970 to the end of 1975. Improvements in productivity apart, this decline was substantially caused by lower exports to countries with growing home production and by higher imports from low-price countries.

The growing pressure from imports is also illustrated by an increase in the share of imports in EEC apparel consumption from 5% in 1969 to approximately 11% in 1975. Expectations are that the percentage will continue to go up in the years ahead.



For the Netherlands and West Germany, very high wage costs in comparison with other Western European countries and the high rate of exchange of the guilder and the D-mark impose additional burdens. It is these factors primarily which have caused a cutback in the share of the Dutch and West German textile and apparel industry in textile raw materials consumption in the six original EEC countries\* from upwards of 50% in 1965 to less than a third now.

Defensive action against the mounting flow of low-priced imports of textile products and also, although to a lesser extent, of chemical fibers, is possible under the 1974 Multi-Fiber Agreement subscribed to by a large number of GATT countries. In the year under review, the EEC concluded agreements with several countries which provide for a limited increase in annual imports into the Common Market.

Notwithstanding these measures, the problems in the Western European industry will have to be tackled chiefly by means of restructuring measures, production shifts to more sophisticated articles combining fashion appeal with an innovative character, and further cooperation between the chemical fiber industry and the textile industry, aimed at optimizing product characteristics and manufacturing technology.

### Growth in world textile consumption

The structural problems in the Western European industry are certainly not indicative of the global growth potential of textile products. Consumption of textile products will continue to increase as a result of the growth in world population and of the upsurge in demand in Third World countries. Since there is little room for further extension of cotton and wool production, it will largely fall to the synthetic fibers to meet the higher demand. We estimate the average annual increase in world consumption of synthetic fibers for textile uses at 8% for the next five years.

The chemical fiber companies in the highly industrialized countries are today less well placed to participate in this growth than the companies in emerging industrial nations. In several of these nations a modern industry has meanwhile developed, which – often helped by State import controls – is able to fill the raw material requirements of the expanding local textile industry. From an early stage, we have contributed to this development by furnishing know-how, management expertise and capital to joint undertakings formed together with local partners, notably in Latin America.

The absorption capacity of the home markets in these countries, which continued to be relatively strong,

restrained the decline of production and shipments in 1975; in addition, recovery in these areas set in earlier.

### Chemical fibers for apparel

Among the synthetic fibers, which account for two-thirds of world consumption of chemical fibers, *polyester* ranks first. Especially in apparel, the position of polyester – as compared with other man-made textile raw materials – has come to be dominant.

In the industrialized countries, and particularly in Western Europe, the uses of *rayon filament* are essentially limited to lining fabrics, while *polyamide (nylon) filament*, which has had to yield much ground to polyester, is now only used in hosiery, foundation garments, stretch sportswear, and similar applications. With the elimination of the problem of static – a breakthrough of our research – applications of nylon filament in lingerie may find new favor. By contrast with consumption of nylon filament in the industrialized countries, which is either stagnant or slightly declining, consumption of these yarns in the Third World countries still exhibits a fair rate of growth.

More universal in its applications, *polyester filament* successfully weathered the textile crisis in terms of sales volume. In Western Europe, shipments were even higher, albeit at extremely low prices. Flat polyester filament is fairly easy to convert into the textured variety, either indirectly or in integrated spin-texturing processes. This feature makes polyester the material *par excellence* to inspire and keep up with trends in fashion. In this context, the Group contributed to a broadening of the range of processing possibilities of textured polyester filament in knitting and, in recent years, also in weaving. Notably in the latter industry, this has created new opportunities for increased productivity. The growth in world consumption of polyester filament until 1980 is estimated to be nearly 10% annually.

In comparison with *filament yarns*, *staple fibers* have suffered even heavier setbacks since mid-1974. Computed on the basis of world capacity, the proportion of staple fibers to filament yarns within the overall category of chemical fibers is 55/45. Within the subcategory of synthetic fibers, the equivalent ratio is 50/50, with *polyester* as the principal material in staple as well as in filament.

For the Akzo group, the ratio of *staple fibers* to *filament yarns* in the chemical fiber category is 37/63, compared to a 35/65 ratio for the synthetics alone. A further gradual shift in these ratios in favor of the filament yarns is expected.

*Synthetic staple*, often blended by spinners with natural staple, is in general even more vulnerable to changes in the economic environment than filament. This heightened vulnerability is mainly caused by the relatively large share

\* Belgium, France, Italy, Luxemburg, the Netherlands and West Germany

of raw materials in production cost, by the price swings of cotton and wool, and especially by its longer residence time, compared to filament yarns, in the pipeline between fiber producer and ultimate consumer, which is more than a year. Some compensation for these greater risks is available in relatively better chances of penetration in textiles and apparel, principally at the expense of cotton. The success of penetration attempts largely depends on future price ratios, notably between polyester and cotton staple.

### Chemical fibers for carpets and other home furnishings

The history of application of synthetic fibers in carpets is still recent, such use having begun at the end of the fifties. At that time, a rapid process of replacement of natural and rayon fibers commenced. *Nylon filament and staple* which, in strength and dyeability, go farthest to meet user requirements, became leaders among the substitutes. In the United States, the share of nylon in carpets has reached approximately 65%, while in the Western European industry it is roughly 45%. The synthetics' penetration of the contract market – a term denoting offices, hotels, exhibition areas and the like – is even higher. The development of antistatic filament and staple, which effectively solved the electric shock problem inherent in nylon, has heightened the usefulness of this material. Another factor likely to strengthen the position of nylon is the increasing prominence of tufted carpets.

The period of tumultuous growth of carpet fibers is, however, now over. The carpet fibers sector strongly felt the effects of the recession in 1975. For the next five years, we nevertheless anticipate an annual increase in consumption of nylon filament in the Western European carpet industry of approximately 5%. The emphasis in this growth will especially be on raising finished product

quality standards, which in recent years have been impaired by an abundance of cheap carpets. Within the framework of our quality drive, we have for some considerable time been stressing higher pile weights. The degree of success in sharing in the growth in consumption will also depend on the ability to regularly offer specialties, which has been and continues to be a tradition in our Group.

In addition to carpet fibers, we also supply to the carpet-making industry high-grade *non-woven (Colback®)* backing material for tufted carpets.

Among the other home furnishings, sheer curtains constitute an important market, which remained relatively stable. This is almost exclusively a market for synthetic filament yarns, especially *polyester filament*.

Its range of yarns, its new product varieties and its customer service have earned Enka Glanzstoff a leading position in Western Europe.

### Chemical fibers for industrial uses

For chemical fibers for industrial uses, there is no structural overcapacity.

Shipments of industrial yarns decreased in 1975, due for one thing to the deterioration of the economy and, for another, to a reduction of massive inventories, which had been built up in the distribution pipeline subsequent to the eruption of the oil crisis. In the fourth quarter of 1975, a return to more normal market conditions began.

Roughly three-quarters of shipments are auto tire reinforcing materials. Our expectations are for a relatively low growth in tire yarn consumption in industrialized countries, contrasting with a significant increase in demand in countries of the Third World as a result of a powerful spread of motorized transportation. For the near future, the industrial yarn demand can be met from the industrialized countries. In the long term, however, importing countries will wish to establish local tire yarn manufacturing operations when warranted by the growth in demand. To forestall the danger of structural overcapacity, we propose to assess the export markets with due caution and to maintain a constant review of

*Shown here is a tubeless radial-ply auto tire. The belt (1), which gives the radial tire its specific properties, consists of two layers of steel cord. Underneath the belt is the carcass (2), which in this tire is composed of two rubber-embedded plies of reinforcing material. In Europe, such plies are mostly made from rayon filament. The plies are wrapped around the beads (3) and run radially across the tire.*



*Inflatable cushions of rubber-coated rayon fabric jack up plane for field repairs to landing gear.*

*Brainwave of a child-loving architect: rigging of Enkalon® rope with steel core makes original and indestructible playground structure.*

capital investment opportunities in the Third World.

With the continued shift to radial tires, the growth in demand should primarily be for *steel cord*. In addition, *polyamide (nylon) 6 and 6.6 yarns* and *polyester yarn* will help meet the increase in demand. Demand for *rayon yarn* is declining; in Europe, steel cord has largely been substituted for this material in the belts of automobile radials. However, we remain convinced that, particularly in Europe, rayon yarn will continue to be prominent as a carcass material for such tires in the years ahead.

Thanks to the multitude of other end-uses for our industrial yarns, the impact of the recession on this sector was weakened. Instances of such end-uses of our specialty yarns are PVC-coated fabrics for tarpaulins, flexible containers, inflatable marquees, and rainwear.

In the sector of yarns for rubberized fabrics, uses of which include conveyor belts, hoses and V-belts, we were able to capitalize on the continuing trend toward mechanization of conveying systems. The increasingly strict standards in force in Europe in regard to the installation of seat belts in new automobiles favorably influenced shipments of our specialty yarn for seat belts.

For our *non-wovens*, we have successfully opened up a number of interesting engineering end-uses. Our *Colbond®*, for instance, is used for reinforcement of bituminous sealing materials for roof coverings, water reservoirs, tunnels and various other civil engineering applications. Our non-wovens are also used for drainage purposes in road construction.



## Chemical products

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### Salt and heavy chemicals

This product group includes salt, chlorine, alkali products, soda ash; chlorinated hydrocarbons, chloroacetic acid and derivatives, vinyl chloride and crop protection chemicals; acetic acid and acetyl and butyl chemicals; dimethyl terephthalate (DMT); methanol and derivatives. It also includes industrial chemicals produced by Akzo Chemie, such as fatty acids, edible and drying oils, citric acid, fluorine compounds, bisphenol A, sulfuric acid, carbon disulfide and other sulfur compounds.

Salt and basic chemicals are used as raw materials in the chemical and other industries. Despite heavy setbacks due to the economic recession and lower growth expectations for various end products, the position of a substantial number of these products is sound. We expect a reasonable, although gradual, recovery toward more normal market conditions. This recovery will be helped by the great caution being exercised by the industry in undertaking major capacity expansions.

For salt, the market situation has for a considerable time been characterized by overcapacity, aggravated by a series of mild winters (low shipments for ice-control purposes) and by the cyclical slump in shipments to industrial users (mainly electrolysis plants). For salt for industrial use, we anticipate an annual growth rate of about 6%, which should in some years' time cancel out the current overcapacity in the Western European evaporated salt industry. Our share in this growth has been insured by important delivery contracts concluded with certain new customers in the year under review.

Electrolysis of high-purity evaporated salt produces chlorine and caustic soda, which have differing end-uses.

*A project to modernize and double acetic acid production of Akzo Zout Chemie's Rotterdam facility was completed in early 1976. Output is largely employed as feedstock in the manufacture of monochloroacetic acid. (1)*

*Second formaldehyde plant of Methanol Chemie Nederland, an Akzo Zout Chemie / DSM joint operation located at Delfzijl, is scheduled to come on stream at mid-1976. (2)*

Discrepancies in growth of consumption inevitably lead to a prolonged excess supply situation for one of these products. For a long time, this was the case for caustic soda. A decrease in shipments of chlorine and expected lower growth of consumption of this product compared with caustic soda, have strengthened the market position of the latter product. This has resulted in stronger demand for soda (*sodium carbonate*), which can be used as a caustic soda substitute in various applications. Expansion of our soda manufacturing facilities, which employ the ammonia soda process, should enable us to capitalize on this development and thus to strengthen our market position in northwest Europe. Our soda output is for the most part used for the production of glass.

Electrolysis processes require much energy. In view of the sharp increase in energy costs, especially in the Netherlands, we have continued and intensified our efforts to effect economies in energy consumption, notably for the diaphragm electrolysis process.

Co-producers and customers are evincing growing interest in Akzo-developed technologies which contribute to improving the efficiency of electrolysis processes (measuring and control systems) as well as to reducing the quantity of heavy metals in effluent by the use of a special ion exchanger process (*Imac<sup>®</sup> TMR*).

In terms of market volume and scope of application, PVC (polyvinyl chloride), which is produced by polymerization of our product *vinyl chloride*, ranks among the most important plastics. The processes to manufacture PVC from basic raw materials also require less energy than those for other plastics.

We expect that consumption of PVC will show moderate growth. It is our view that this growth will be unaffected by the strict standards now in force as regards vinyl chloride concentrations in the atmosphere of



production and processing plants and as regards the use of PVC for the packaging of foods and beverages, since the technological requisites to meet these standards are available in the industry.

In the year under review, demand for our *petrochemicals* was generally weak. However, for a number of products favorable prospects induced expansion or modernization of manufacturing facilities. The products concerned included *acetic acid, monochloroacetic acid and derivatives, and phenoxy herbicides*. For herbicides, 1975 was a good year as a result of short supply on the world market.

Our new production unit for monochloroacetic acid and derivatives employs an Akzo-developed continuous process. Output is used partly for the manufacture of phenoxy herbicides and industrial cellulose-based chemicals (Enka Glanzstoff).

Methanol Chemie Nederland (MCN), a joint venture with DSM, produces *methanol* from natural gas. The greater part of methanol output is converted into *formaldehyde*, a

product largely used in the plastics industry for the manufacture of phenol-, urea- and melamine-formaldehyde resins and adhesives. The principal user of these derivatives is the Western European building industry, which employs them to make particle board and other products. MCN itself processes approximately one half of its methanol output into derivatives. MCN's production capacity for methanol will be doubled; for this expansion, adequate supplies of natural gas are available.

Within Akzo Chemie's varied range of chemical raw materials, we broadened the international base for *oils and fatty acids* by acquisition of an interest in the Spanish company Cailá y Parés.

As a producer of *halogenated hydrocarbons*, which are used as aerosol propellents, we are greatly interested in a scientific evaluation of the supposed effect of these gases on the ozone layer of the stratosphere and the ensuing harmful long-term consequences for man and his environment. The pertinent investigation, which we support financially, is now in progress.

## Specialty chemicals

This product group comprises the products of Akzo Chemie, with the exception of the industrial chemicals included under salt and heavy chemicals, and also comprises the products of Armak (Akzona).

These products include: process chemicals, additives, auxiliaries, etc., such as initiators, catalysts, rubber and paper chemicals, sequestering agents, disinfectants, fillers, stabilizers, surfactants, such as nitrogen derivatives and raw materials for the detergent industry, paint driers.

The products of this group generally have a higher added value per unit than basic chemicals. The development, manufacture and sale of specialty chemicals is mainly aimed at highly specialized applications by industrial users. As a rule, suppliers must meet very specific customer requirements in respect of composition and performance of their chemicals. This is not surprising as these products, which are used in relatively small quantities in chemical processes, have an important regulating function and govern to a large extent the qualitative and quantitative output of processes.

In sales volume and market position, *initiators, catalysts and thermoplastics additives* (such as *stabilizers*), as well as *surfactants* (such as *nitrogen derivatives*) are among our principal specialty chemicals.

*Initiators* are used in the manufacture of vinyl polymers, such as polyethylene and polyvinyl chloride, and for the formation of cross-links during curing of unsaturated

polyester resins and the vulcanization of rubbers. The leading position held by our technically sophisticated range of *peroxides* in the chemical industry in Europe and elsewhere necessitates relatively strong research efforts to enable us to regularly introduce new product varieties to meet customer requirements. These efforts center on the search for manufacturing processes and products which insure optimum safety; additionally, much attention is given to controlling the risks inherent in the transport and handling of these products.

Our new peroxide facility at Mons (Belgium), where further expansions of production capacity will be concentrated, meets high standards of safety for both personnel and surroundings.

*Catalysts* mainly consist of alumina, silica and metal compounds and are used to impart direction (selectivity) and speed (activity) to chemical processes. Among other factors, these powers of catalysts are due to their very large active surface (the surface area of 1 gram is equal to that of a lawn tennis court).

In this product area, too, research and innovation are essential; primary objectives are further increases in activity and selectivity and the improvement of mechanical strength properties. One successful outcome of this work has been our *MZ-5* molecular sieve catalyst, which is used in the production of gasoline from heavy oil by cracking.

Our catalysts for desulfurization of fuel oil and crude oil distillates help abate pollution. Production centers are in the Netherlands and Japan, and since 1975 also in the United States (Akzona). We also focus attention on

*In 1974 and 1975, Akzo Chemie's Amsterdam-Noord complex introduced various measures to reduce plant noise, involving a total outlay of about two million guilders. One benefit to nearby residents has been the elimination of the 'vacuum cleaner' whine emitted by the prilling tower in the production of bisphenol.*

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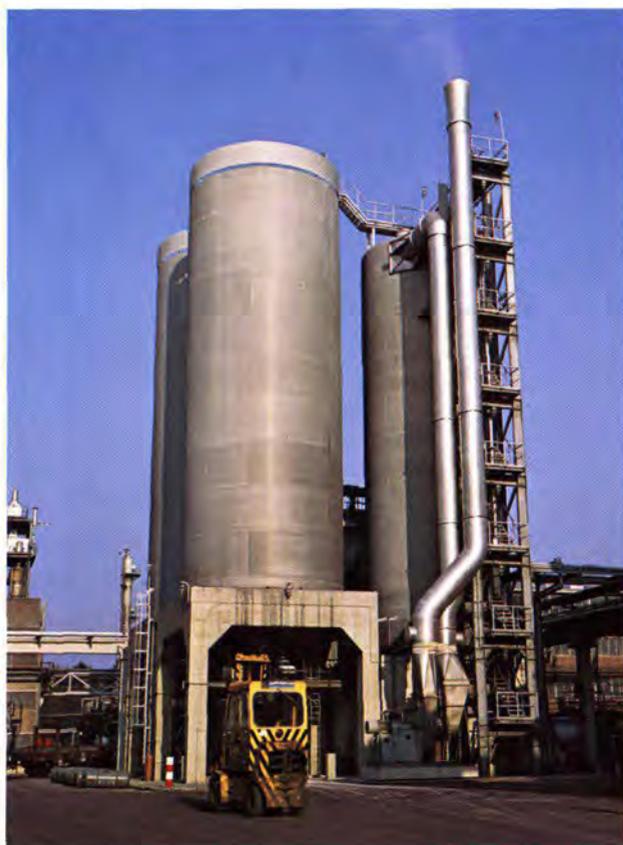
catalysts for the removal of harmful components from stack gases. In a longer-term perspective, we feel there are good prospects for a positive contribution on our part to the development of catalytic processes for the production of basic chemicals from coal.

In the year under review, we introduced a new and unique range of *stabilizers* for the PVC-processing industry (*Stanclere® Estertins*). The low volatility and low toxicity of these additives will help advance occupational hygiene. We expect to be able to make further contributions to the trend toward non-toxic organic stabilizers.

*Surfactants* are used to impart desired changes in the properties of surfaces. The range of end-uses of these substances is very extensive and is centered on the detergent industry. *Nitrogen derivatives* of fatty acids

constitute an important group of surfactants. With manufacturing facilities in the United States (Akzona), Europe and Japan, the Group holds a leading position on the world market for these products. Through construction of a production unit for nitrogen derivatives at Mons (Belgium), we aim not only at supplying the growing market for laundry softeners, but at offering a range of specialties to European market sectors exhibiting relatively higher growth rates.

For the paper industry, we developed a polyurethane-based *synthetic size* (*Cyclopal®*), which, besides having good processing properties, is designed to materially reduce the quantity of pollutants in the paper industry's effluent. Our worldwide introduction of this size has now advanced sufficiently for us to expect to be able to commence commercial-scale production in 1977.



*Children, color and creativity. Our Talens products are a key to the world of imagination – for youngsters and grown-ups!*

## Coatings

This product group includes paints, powder coatings, synthetic resins, adhesives and waxes for:  
industrial markets, e.g. for vehicles and for the metal products, wood products, furniture, packaging and other industries;  
trade markets, e.g. for auto refinishing, building, road marking, marine and other anti-corrosive uses;  
the do-it-yourself market.

To the traditional demands made on paint, which include the protection of surfaces and the improvement of their appearance, more exacting requirements have been added over the years. These requirements vary from enhanced performance on all sorts of materials, even under adverse conditions, to compatibility with advanced labor-saving techniques for the application of coatings

possessing high durability. In addition, society increasingly demands products which have no harmful effects on the environment.

As a consequence, the paint-making trade of former years has evolved into a chemical industry of specialties in the areas of both coating materials and application techniques. This development would have been impossible without the contribution of research, whose importance is still growing, and the creation of a strong technical service capability. This also explains why the major paint industries now form part of large chemical groups.

The range of products and application techniques offered by Akzo Coatings covers virtually the entire coatings field. The company has a prominent position in the Western European market. Despite the economic



*Paints equal color and so are an important element of our everyday environment. Akzo Coatings consultants advise on color coordination. (1)*

*In this Decorette®, the Flexa® color mixing machine offers do-it-yourself painters an almost unlimited choice of colors. (2)*

*The Organon-developed dissolution battery permits solution speeds of active ingredients of tablets to be measured. The readings provide an indication of the rate at which absorption proceeds in the human body. (3)*

*From the dried capsules of the poppy, Diosynth extracts the alkaloids. The processed capsules are subsequently used by others to make a high-grade organic manure. (4)*

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recession, it succeeded in maintaining or improving its position in various product markets.

This is notably true of our *auto refinishes*; in several countries, we were able to increase our market share. Our strength is especially in our research, which regularly leads to qualitative improvements in our coatings. Our introduction of a non-polluting universal primer (*autoflex® washprimer extra mild*) was a further step toward improvement of working conditions in body shops.

The slump in the automobile industry affected shipments of our *automotive coatings*, although it did not result in any reduction in our market share. The recovery of automobile production now under way is attended by an increasingly noticeable trend toward smaller cars, with a corresponding decrease in coatings requirements. Nevertheless, we expect to be able to expand our shipments in line with the growth of automobile production. Our water-borne and our high-solids products will enable us to increasingly meet the demand for energy-saving and non-polluting coating systems, which is especially evident in the automobile industry.

Astral and Diamond Shamrock established Dacral (France), a joint venture for the marketing of *Dacromet®* and *Zincromet®* developed by Diamond Shamrock. Interest in these corrosion-resistant *steel-coating systems* is particularly apparent in the European automobile industry. We will also produce these products.

Through our *coil-coating* process, we have secured a promising position in the rapidly expanding market for the coating of steel strip.

The growing importance of the *do-it-yourself* market, which accounts for some 20% of our European sales, requires increasing attention for the composition and the manner of distribution of our product range, which is not solely restricted to coatings. The introduction of our color mixing machines in the Benelux proved a success; we expect to be able to realize similar results in other countries.

Talens, which enjoys a worldwide reputation in the area of *artists' paints*, is strengthening its orientation toward the international market for school and hobby supplies and for products for creative leisure-time pursuits.

Synthese, which supplies *synthetic resins* to our own coatings plants as well as other users, is also engaged in the development of resin specialties and systems for both coatings and other end-uses, such as printing inks and adhesives. In the year under review, resins suitable for curing in thin layers by ultraviolet radiation were introduced successfully.

Our affiliates in Brazil, several African countries and Thailand are showing fair to good development. Much attention is given to the strengthening of local know-how to create new and improved sales opportunities.

The 'Stichting Sikkensprijs' (Sikkens Prize Foundation), which lends financial support to projects of a social, cultural or scientific nature in which color is a specific medium, again awarded grants in the year under review.



*Organon Teknika's latest, remote-controlled X-ray table enables the radiologist to simultaneously keep a better view of monitor and patient during examination. (5)*

*In early 1976, Organon Inc. (Akzona) introduced Genesis®, a combination-type product based on synthetic estrogens used in treating menopausal complaints. (6)*

## Pharmaceuticals, consumer products and miscellaneous products

### Pharmaceuticals

This product group includes:

ethical drugs, such as anabolics, oral contraceptives, corticoids, sex hormones and diagnostics;  
non-prescription drugs, such as tonics, vitamins, pain-killers, cough remedies, sweetening agents and diagnostics;  
hospital supplies, such as infusion liquids, blood fractions, diagnostics and medical equipment;  
raw materials for the pharmaceutical industry;  
veterinary products, such as vaccines and hormone preparations;  
crop protection products.

The growth of world population and increasing care of human, animal and plant health are factors placing the pharmaceutical industry in a better position economically

than other branches of industry. One important consequence is the industry's lower vulnerability to economic fluctuations.

On the other hand, the pharmaceutical industry must rightly meet strict standards regarding the approval of drugs. This requires increasing expenditures for research and development.

World consumption of pharmaceuticals is estimated to total Hfl 100,000 million a year. It is the task of an innovative pharmaceutical industry to contribute to optimum health care through the development of new drugs. However, this requires adequate returns on products and services to enable the industry to finance the attendant increase in research and development activities.

The sharp rise in costs in the services sector and in research and development also forces Akzo Pharma to focus attention on improving its geographical distribution

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and product mix through independent growth in selected areas as well as through acquisitions.

Organon (*ethical drugs*) developed favorably in 1975. *Fludilat*<sup>®</sup>, a preparation with vasodilating properties, is now being introduced on a worldwide scale. Applications for international registration were filed and introduction is in preparation for *Sensit*<sup>®</sup>, a coronary vasodilator for the treatment of angina pectoris and other ischemic heart diseases, which has so far only been used in West Germany.

For the coming years, we expect to introduce our *antidepressant Tolvon*<sup>®</sup> in all major countries. Following the registration in Switzerland and the Republic of Ireland in 1974, the product was registered in West Germany and Mexico in the year under review. We introduced *Tolvon*<sup>®</sup> in Switzerland and West Germany commercially this year.

The sector of *hospital supplies* (Organon Teknika) enjoyed a prosperous year. Further internationalization of Organon Teknika's existing operations was effected. In addition, *Hepanosticon*<sup>®</sup>, a test to detect the presence of a specific causative agent of hepatitis, met with satisfactory response from clinical laboratories.

The *Echo cardioVisor*<sup>®</sup> was complemented by addition of a videoconverter, which enables moving images of the heart to be shown directly on a TV screen.

For the *Internost*<sup>®</sup> Pacific universal X-ray apparatus, a new diagnostic possibility was developed. Organon Teknika further succeeded, on the basis of new construction techniques, in introducing to the market a completely new, remote-controlled X-ray table.

Toward the end of the year, marketing was begun of a unique electrode for the monitoring of the heart and respiratory functions of infants (*InfanTrode*<sup>®</sup>).

In 1975, Chefaro (*non-prescription drugs*) succeeded in maintaining or improving its market share for most product classes, notably for its anti-acne preparations (*Axolan*<sup>®</sup>). Considerable efforts were made at anticipating and meeting new government standards in respect of

non-prescription drugs. Chefaro continues to aim at a further broadening of its geographical distribution.

Diosynth (*pharmaceutical raw materials*) showed continued strong growth. In the *alkaloids* sector, we insured a reasonably satisfactory supply of poppy capsules for the manufacture of opiates. In the area of *biochemical raw materials*, Diosynth is among the world's largest producers of *heparin*. Heparin is a natural substance regulating the clotting of blood, which is finding increasing use. It is also applied in kidney dialysis. To insure a regular and geographically balanced supply, we acquired a production company in the United States. In West Germany, a heparin production unit, which is located on an existing Akzo site, was started; in France, production is being expanded. The supply of raw materials for *pharmaco-chemical basic products* was satisfactory; in this sector, too, international projects are under development to insure adequate supply.

Intervet (*veterinary products*), whose development was again restrained mainly as a result of difficulties in the European poultry industry, introduced in the United Kingdom a new vaccine against Gumboro's disease. In poultry, this disease disturbs the development of natural defenses against infection.

AAgrunol (*crop protection products*) experienced a moderate year. The company's range of products for home and garden use, which showed a satisfactory development, was extended by addition of three new products, *AAdural*<sup>®</sup> (cut-flower nutrient), *AAflix*<sup>®</sup> (insecticide) and *AAwiera*<sup>®</sup> (control of algae on stone and glass). Our objective is to insure a further broadening of the product range, where desirable in cooperation with others.

Organon Inc. (Akzona) developed favorably in the year under review and introduced certain hormone preparations and diagnostics not previously offered on the U.S. market.

In 1976, Akzona and Akzo Pharma will commence joint production and marketing of mercury-free single-use clinical thermometers.

## Consumer products

This product group includes:

detergents, cleaning products and bleaching agents;  
paper products for household use;  
health and body-care products, such as fragrances and cosmetics, and sprays;  
foodstuffs, such as oils, fats, sauces, soups, preserves, party snacks and various food specialties.

In terms of volume, the market for consumer products offered fair resistance to the impact of the adverse economic developments in the year under review. As a result, we were able to maintain adequate levels of production and shipments.

The direct consumer orientation calls for a marketing-centered approach and effective advertising and selling policies to improve established positions in this highly competitive market. This requires continual adaptation, so as to be able to respond in a timely fashion to ever more frequent changes in the demand pattern of the public, which displays increasing discrimination. Additionally, the

social acceptability of new products is a factor of growing importance.

Through such well-known brand-name products as *Biotex*<sup>®</sup>, *Dobbelman*<sup>®</sup>, *Edet*<sup>®</sup>, *Duyvis*<sup>®</sup>, *Zwitsal*<sup>®</sup> and *Roosvicee*<sup>®</sup>, our European consumer products group has won consumer confidence. A high priority has been assigned to geographical expansion of activities outside the Benelux and Scandinavia, either in collaboration with others or not.

To insure a healthy development of profitability, the base of our operations needs further broadening. For this purpose, we are constantly working to develop new and improved products.

Of our four classes of products, *detergents* showed a steady favorable development. *Biotex*<sup>®</sup> succeeded in maintaining its position in the various countries. Shipments of *Dobbelman*<sup>®</sup>-*gezinswasmiddel* were again up in the Netherlands; in the latter half of the year, we introduced this laundry detergent in Belgium.

Highly competitive market conditions caused our *Edet*<sup>®</sup> paper products to suffer a setback as regards both shipments and price level. This was due in part to the economic recession, whose impact on this market was sharper than on other sectors. An added factor was the depressed price level in Sweden and France due to government controls. As a consequence, penetration of the French market was slower than expected. This was also the case in West Germany. Shipments to institutional users were maintained at a reasonable level.

In the sector of *health and body-care products*, the range of health products of Recter, which includes *Roosvicee*<sup>®</sup> mixed-fruit syrup, developed favorably. Through introduction of new *fragrances and cosmetics* and increased concentration on export opportunities, we expect to be able to further improve the position of this class of

products. Our aerosol operations, which consist of filling of spray cans with propellents on a commission basis, were materially affected by adverse publicity concerning the supposed harmful effect of these gases.

In the *foodstuffs* sector, we again successfully introduced a new line of party snacks (*Duyvis*<sup>®</sup>) to the Dutch market. In France, we have achieved a prominent position for our range of nuts (*Bénénuts*<sup>®</sup>).

In the year under review, we adjusted the organization of the production and selling operations of our Dutch plants in this sector to achieve a new structure under central management. Initial experiences have been favorable, although some structurally weak parts of the revised organization will still require considerable attention.



*The use of Cuprophan® hollow fibers as dialysis membranes in artificial kidneys is meeting with increasing professional interest. This form of membrane enhances efficiency of dialysis and may substantially shorten treatment sessions.*

## Miscellaneous products

Miscellaneous products include:  
plastics, film, adhesive tape, cellulose-based industrial chemicals (CMC);  
technical products, such as wire and cable for electrical and electronic end-uses, and machinery and equipment for the chemical fiber and plastics industries;  
leather and synthetic leather, shammies, sponges;  
dialysis membranes.

In cooperation with others, Akzo Plastics (Enka Glanzstoff) successfully completed the technological development of a plastic bottle for carbonated beverages. In addition to high safety and low weight, this bottle, which consists of a special polyester grade (Arnite® PETP), features high clarity and non-toxicity.

In the year under review, we extended our range of Akulon® (polyamide) chips through addition of mineral-filled and high-viscous grades. The new grades enable injection molders to realize economies in the production of technical parts subject to narrow tolerance limits.

Our cellulose-based drilling-mud additives (Stafflo®, Depramin®) help drilling-muds, which are used in oil and gas exploration, meet a varied range of requirements imposed by geology and climate.

Despite the economic recession in 1975, Barmag Barmer Maschinenfabrik again justified its worldwide reputation as a producer of advanced machinery mainly for the chemical fiber and plastics industries. Sales were maintained at the 1974 level; the share of exports rose to 85%. By virtue of strong research efforts, the company was able over the past few years to develop various new machine types, which not only meet high standards in respect of technology and economics, but permit easier operation and improve working conditions through a reduction in noise levels and other features.

The period of vigorous growth of Brand-Rex (Akzona), a producer of wire and cable, was interrupted in 1975 by the reversal of the economy. Except Pyle-National Company, which specializes in electrical and electronic connector systems, all product groups were hit by the recession, which prompted measures to adapt organization (including a reduction of staff) and product range.

In the latter half of 1975, Armira (Akzona) benefited from a recovery in the U.S. footwear industry. Additionally, increased exports of unfinished leathers to Eastern bloc countries and the company's strengthened position in the personal leather goods market contributed to a distinct improvement in business.

Production and shipments of Enka Glanzstoff's synthetic leather (Xylee®) dropped substantially, due to low leather prices.

Enka Glanzstoff's dialysis membranes (Cuprophan®), which are used in artificial kidneys, experienced a favorable year. Dialysis by means of hollow fibers is now being subjected to clinical tests by a number of customers. Worldwide interest in our membranes – films and hollow fibers alike – is growing strongly.

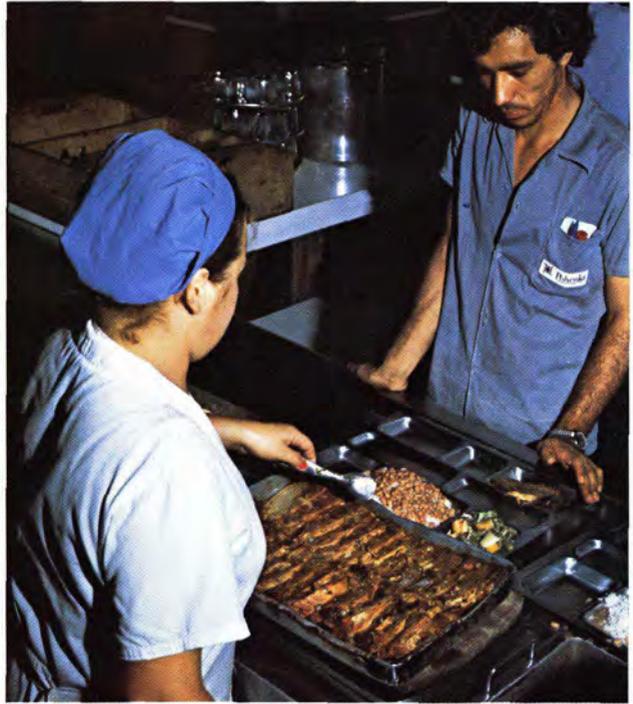


Arnhem, March 25, 1976

the board of management

Medical care at our CIRNE solar salt plant (Brazil) also extends to employees' families. (1) The company helps defray the expense of the local elementary school, which provides a basic education to some 400 children, half of whom come from CIRNE families. (2) Plant baseball team in action at Fibras Químicas (Mexico). (3)

Polyenka (Brazil) cafeteria serves 800 meals a day. (4) A view of the annual Enka de Colombia-sponsored chess tournament for 7 to 14-year old school children from the Medellín area. Competition among thousands of chess buffs lasts four months and produces two winners – one of either sex – who receive a scholarship for one year. (5)



# Management

March, 1976

Akzo N.V. is the Group's holding company with direct and indirect participations in a number of companies. Together they constitute the Akzo group.

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## Board of management of Akzo N.V.

The members of the board of management are jointly responsible for Group policy.

A number of board members are primarily charged with the preparation of Group policy and with the day-to-day management of Akzo N.V. Within this group of board members, a division of duties is in force respecting both the coordination of product-related interests and functional activities within the Group, including responsibility for a number of central staff departments.

G. Kraijenhoff	Group strategy, public relations; pharmaceutical interests
S. C. Bakkenist	social policy, organization, internal auditing; consumer product interests
H. J. Schlange-Schöningen B. Zevenbergen H. J. Krusinga	international operations chemical fiber interests financial, accounting and legal policies; automation affairs
J. A. Wolhoff	chemical product interests

The other board members are specifically charged with the management of Group units.

A. G. van den Bos	Akzo Chemie
H. van Doodewaerd	Akzo Consumenten Produkten
A. van Driel	Akzo Coatings
J. van den Driest	Enka Glanzstoff
H. Kramers	Akzo Research & Engineering
D. W. van Krevelen	Akzo Research & Engineering
J. Veldman	Akzo Pharma
H. J. J. van der Werf*	Akzo Zout Chemie
H. G. Zempelin	Enka Glanzstoff

The secretary of the board of management is A. H. M. Wentholt, who is also responsible for the staff departments of Strategic Planning and Economic Affairs.

Acting as adviser to the board of management is W. K. N. Schmelzer, specifically in relation to international affairs and issues of a general social nature.

## Management of central staff departments

M. W. Arts	Internal Auditing
K. D. Brown	Corporate Business Development
A. M. van Haastrecht	Organization
J. M. Hessels	Financial Affairs
C. Hoek	Legal Affairs
B. Klaverstijn	Public Relations
J. K. G. Meijnen	Insurance Affairs
B. W. van Mourik Broekman	Personnel Affairs
K. J. Mulder	Economic Affairs
O. H. Nijman	Fiscal Affairs
R. J. Ovezall	Accounting and Management Information
R. M. Smulders	Economic Relations with State Trading Nations
T. M. Tieleman	Strategic Planning
A. W. Zijlker	Computer Affairs

## Other staff officers

J. P. van den Bent	general affairs
Mrs. M. A. van Damme- van Weele	chemical development
E. W. Meier	international relations

## Management of Akzo Research & Engineering

D. W. van Krevelen	president
H. Kramers	deputy president
F. C. A. A. van Berkel	
E. Meyer	

## Management of Akzo Engineering

J. R. Eppenga	
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\* proposed for appointment to the Akzo N.V. board of management, effective May 6, 1976

**Managements of Group companies and divisions in which Akzo N.V. holds an interest of 95% or more**

*Enka Glanzstoff*

H. G. Zempelin	president
J. van den Driest	deputy president
F. C. A. A. van Berkel	
J. R. Hutter	
S. Lochner	
E. Meyer	
G. Tückmantel	
J. Verhaar	

*Akzo International*

H. J. Schlange-Schöningen	president
H. G. Karus	deputy president
G. G. Cerutti	
H. W. Muzerie	
A. F. J. C. Zillikens	

*Akzo Zout Chemie*

H. J. J. van der Werf	president
M. Boogaardt	
J. H. Dijkema	
G. H. W. Meeder	

*Akzo Chemie*

A. G. van den Bos	president
J. C. P. van Oosterom	
M. D. Westermann	
M. E. Hartman	
D. B. Kagenaar	
P. W. Pfeiffer	
H. A. Praetorius	

*Akzo Coatings*

A. van Driel	president
R. de Bonneval	
O. Daum	
C. P. B. Littooy	
W. L. W. Ludekens	
G. Macovich	
H. van Prooyen, Sr.	
C. Zaal	

*Akzo Pharma*

J. Veldman	president
G. Hes	
C. P. Spoel	
J. H. H. Florax	
H. M. Schut	
F. L. Vekemans	
A. G. Vermeeren	

*Akzo Consumenten Produkten*

H. van Doodewaerd	president
W. P. Boerma	
T. Bouterse	
M. A. Hoolboom	
P. B. van Hulst	
H. B. Jacobs	
A. M. van der Linden	
R. S. Schortinghuis	
J. E. H. Sikkink	

**Managements of national organizations**

*Akzo Nederland*

W. J. Wolff	president
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*Akzo België*

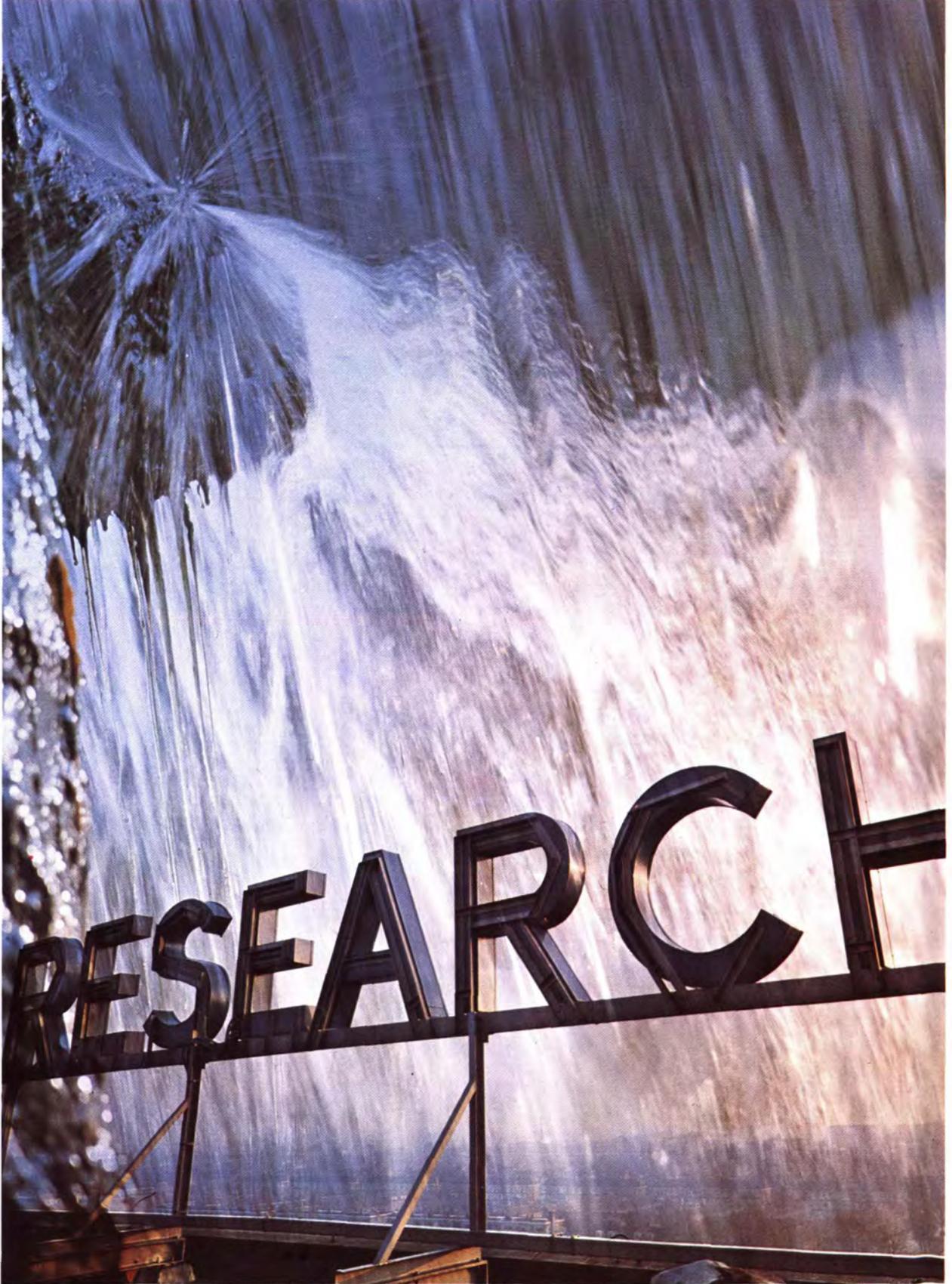
C. Vlug	president
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*Akzo Ltda, Brazil*

A. A. Loudon	president
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*Mercator Internationaal, Japan*

T. A. Townsend	managing director
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In the various Research and Development (R&D) activities of our Group we employ slightly more than 6 per cent of our personnel. The total expenditures for R&D in 1975 amounted to approximately Hfl 390 million. We consider these expenditures to be an important investment in the area of science and technology by which we both support ongoing business and assist in the preparation of new activities. How did we – and do we – exploit this investment? And what do we expect to gain from our considerable potential in technical knowledge and skills?

We thought it useful to discuss these questions more fully in this Annual Report, at the same time reminding ourselves that R&D does not lend itself to quantitative analysis in simple economic terms.

#### The functions of R&D

In no sense is our R&D detached from the whole of the business. This is most evident where R&D directly supports the current activities of the Group. The supporting R&D consists of technical assistance to marketing in the form of quality control and applications research, and of the solving of specific production problems. It results in numerous improvements in existing products and processes in terms of enhanced performance and efficiency, operational and users' safety and environmental protection.

This work of a supporting nature, which represents roughly 50 per cent of our overall R&D effort, is of vital importance in maintaining our competitive position. Normally, its objectives are clear and short-term, the probability of technical success is high, and the cost-benefit ratio is favorable. Consequently, a natural tendency might develop to emphasize this kind of work. We therefore are careful to insure that R&D for longer-term innovations is also given proper attention and scope.

The part of R&D which is directed toward *innovation* – mostly relating to our existing activities – amounts to about 40 per cent of total R&D. This figure does not claim a high degree of accuracy since a

gradual transition exists between improvements achieved in the supporting area and contributions of an innovative character which can be decisive for the future position of the Group.

In comparison with supporting R&D, innovative R&D involves a relatively high degree of risk. Moreover, the often arduous road from an invention or a technical opportunity to commercial exploitation cannot be successfully negotiated without concurrent economic and market studies, and without effective combined action between technical and market development. We exploit all possible means to promote the necessary dialogue and interaction between the functions involved.

Included amongst these means are joint project teams, formalized procedures for project appraisal, cost-benefit analyses of major R&D projects, and concrete middle-term technological scouting studies. We feel that we have to become more selective in the choice of innovative projects, and that in the course of a project the probability of successful realization must be continuously assessed from all angles.

About 10 per cent of the total R&D effort involves *exploratory* research, and the development of *methods* in support of R&D itself. In both areas we aim to add to the level of our knowledge and skills.

Often, the results of methodological research can be of direct use, both within and outside of the R&D organization. We consider the building up of advanced knowledge through exploratory research in carefully selected areas to be essential, even if the relationship between an exploratory subject area and the possibility of application may not be evident from the outset.

#### Distribution of R&D in the Group

Of the R&D functions described above, 92 per cent is carried out in R&D centers operating under divisional responsibility, and 8 per cent in a central research organization under corporate responsibility (Corporate Research).

For historical reasons, and also as a result of the decentralized divisional structure of our Group, there is a rather wide distribution of R&D centers with respect to both location and product group. This is illustrated in the table on page 32.

Nearly all R&D units indicated in the table are in close proximity to other essential functions of the business, in particular marketing and/or production. We are convinced that the resulting involvement of R&D in current operations is stimulating, and has a positive effect on overall performance. For the smaller R&D units it should, however, be noted that this setup may also have disadvantages in two respects. In the first place, too much stress may be placed on executing short-term assignments of a supporting nature. Secondly, the turnover of scientific staff may be insufficient for keeping up with general developments in science. In both instances, the Corporate Research organization can, and does, play an important role as a backup for these units.

In this system each divisional R&D director has a particular responsibility for coordination and program allocation among the various R&D centers of his division. With respect to our operations overseas, especially Akzona, agreements exist regulating mutual exchange of R&D information in the area of chemical fibers and the utilization of know-how. An existing arrangement between Akzo and Akzona on the free exchange of R&D information in the chemical field was recently supplemented by a research agreement between Akzo Chemie and ArmaK from which we expect excellent overseas cooperation in sectors of common interest. In general, we are in favor of international assignment of R&D activities where need of local support is evident. On the other hand, for important innovative projects we will have to continue using the existing major R&D centers.

#### Diversity of the divisional R&D

In addition to the geographical and functional distribution of our R&D, there is

a great diversity in tasks and character. This is illustrated below for our main product groups.

**Chemical fibers**

In recent decades the man-made fiber industry has shown spectacular growth, both in volume and in diversity, in which our Group has played a substantial role.

Our chemical fibers R&D, which has its origins in cellulosic fiber manufacture and not, as in the case of many of our competitors, in the organic chemical industry, contributed to this growth. Rather than bringing out new polymers, our strength has been in recognizing the full range of the needs of industry, all the way from apparel to engineering applications. Our R&D's accomplishments are evident in the first instance in the development and streamlining of production processes, resulting in a full line of fiber products, based on most major polymers, and designed – in conjunction with capable technical service and product application institutes – to meet our customers' needs.

Thus we have been able to build up our position in the market and to supply know-how and entire plants to many countries in the world. In addition to

standard product lines we have a record of developing special products, which have put the Group and our customers in a more favorable market position.

Today, in Western Europe the chemical fiber industry has clearly reached a point, especially in the textile filament and fiber field, at which prospects for growth and profitability are substantially reduced. Under these circumstances R&D will have to concentrate on rationalization and process optimization, while less effort will have to be spent on major high-risk innovative projects.

At the same time we will continue to take advantage of our skills and experience, which in the past years have led to such specialties as:

- *Enkacomfort*<sup>®</sup>, an antistatic polyamide textile yarn for lingerie, which set a standard in the industry;
- *Diolen*<sup>®</sup> BC (improved), a polyester yarn with a moderate latent texture for silk weaving;
- *Diolen*<sup>®</sup> XF and American Enka's successful *Golden Touch*<sup>®</sup>, fine multi-filament polyester yarns for silk weaving and fine gauge jersey knitting;
- *Diolen*<sup>®</sup> type 42, staple fiber for carrier-free dyeing;
- *Spectro Dye*<sup>®</sup> HZ, an improved multi-colored printed bulked continuous

polyamide filament yarn for tufted carpets.

In the industrial yarn field we have a strong position as a supplier of the major industrial yarn types. We have accumulated considerable process and product know-how with respect to the aromatic polyamide *Arenka*<sup>®</sup>, which is intended for use in tires and has many other potential industrial end-uses.

Within the scope of our 'Engineering with Fibers' activities, we are participating in a project to test a 1 : 4 scale model of an inflatable dam structure made of rubber-coated heavy industrial fabrics to protect the city of Venice against gradual damage by flooding during high tides.

**Salt and heavy chemicals**

In this area, R&D is mainly oriented toward processes for the production of bulk chemicals. A systematic analysis of the possibilities of process improvement of existing plants can often result in considerable savings of raw materials and energy, and in increases in production capacity. In this field of activity, R&D, together with the engineering and production functions, has obtained clearly positive economic results, as well as proprietary know-how in the following areas: brine purification, vacuum salt production, salt electrolysis, including a new effective system for anode current control, manufacture of soda ash, and new processes for the production of monochloro- and trichloroacetic acid, and of herbicide compounds based thereon.

New processes are under study with respect to a number of products, aimed at further product diversification and/or greater vertical integration within the Group.

Much effort is being expended on the development of special pollution abatement systems. As an offshoot of our endeavors to solve our own problems in this regard, we have been able to license a number of results – such as various systems for the removal of mercury from the products and waste streams of electrolysis plants. This rapidly increasing licensing activity will remain an important factor in our future prospects.

**Survey of the main R&D centers**

	Netherlands	West Germany	France	United Kingdom	Spain*	United States**
chemical fibers	●	●●			○	●
salt and heavy chemicals	●					
specialty chemicals	●●	○		○		○
coatings	●○	●	●			
pharmaceuticals	●○	○		○		○
consumer products	○	○				
Corporate Research	●	○				

● = over 150 personnel      \* La Seda de Barcelona  
 ○ = under 150 personnel      \*\* Akzona

### Specialty chemicals

In this sector the emphasis of R&D is on the products and their use by industrial customers. The main branches of industry served are oil refining and treatment, polymer production and plastics processing, and the rubber, paper and food industries.

Of the new products for which the development stage was successfully concluded during the past two years, we mention: catalysts for naphtha cracking and hydro-desulfurization with enhanced catalytic activity and improved mechanical stability, a number of initiators for the curing of resins under ultraviolet radiation, a new papersizing compound based on polyurethanes (*Cyclopa*<sup>®</sup>), a new family of organotin compounds for the stabilization of plastics, and a special carbon black which upon addition to several kinds of plastics considerably increases electrical conductivity. The further development of an entirely new synthesis of citric acid was discontinued because

of decreased competitive potential.

The performance chemicals we supply to the above-mentioned industries offer substantial opportunities for technical and economic advancement. Although as a supplier we generally cannot induce drastic changes in such industries, through our established contacts we are in a position to detect their needs, to which we may be able to provide an answer. One approach is to extend our existing product range and/or to provide complete systems based on our products. Another equally important approach is to expand the function and increase the effectiveness of current products.

Conservation and environmental protection have had considerable influence in this area; in addition, we may expect that aspects of product safety will increasingly require new solutions. The intensive cooperation between the divisional R&D function and the exploratory chemical research department of the Corporate Research organization has led to a number

of potential innovations, now under study, which would fit in with the above requirements.

### Coatings

A great part of R&D has a short-term character and provides direct support to marketing and production in the national organizations. Both through product improvement and adaptation to market circumstances and customer requirements R&D helps to reduce costs and to optimize performance.

The industrial customer is giving increasing attention to the economics of the paint system as a whole – i.e. the paint, its application, and the maintenance and depreciation of the equipment. R&D is therefore progressively becoming more oriented toward optimization of system costs, which requires a project approach by a multidisciplinary team. This has resulted, for example, in the introduction in the automotive and other industries of new products based on water-soluble resins, the application of which also meets increasingly stringent antipollution regulations. Our position with respect to these products is unique and protected by an active patent policy.

Another example is the application of the electrocoat process for the corrosion protection of steel, mainly in the automobile industry, based on epoxy resins and, recently, also on polybutadiene resins. Long-term exploratory research in cooperation with Corporate Research has been intensified over the past few years, and promising starting-points have been found for further innovation.

For the decorative and do-it-yourself markets, we are concentrating on the development of pigment pastes based on both oil-borne and water-borne resin systems. Such pastes for processing in color mixing machines permit rapid color service without the necessity of having excessive inventory in many different colors.

Our R&D in the resin field led to the development of resin systems which permit rapid curing under ultraviolet radiation. These UV-curing resins are of particular value to the printing-ink industry.



### Pharmaceuticals

The development of new preparations is a central objective of the pharmaceutical industry. Consequently, our R&D efforts in this area are almost entirely innovative. They involve the investigation of the therapeutic effects of new preparations as well as the study of possible side-effects and after-effects. Although we spend a relatively large portion of our pharmaceutical sales on R&D activities, these detailed investigative requirements and the need for specialization necessitate a restriction of our areas of research.

Hence, our R&D efforts center on the areas of fertility control, sex hormones, psychotropic drugs, treatment of inflammation, and diagnostics. It is our view that we have sufficient specialized knowledge in these fields to continue our research with reasonable chances of success.

Our expanding activities in the sector of pharmaceutical raw materials and intermediates require an increasing R&D effort. This concerns the selection and collection of base materials of agricultural and animal origin, the extraction of active components from these biological materials, and, in particular, subsequent complex chemical transformations. The interrelationship of these particular efforts with overall pharmaceutical research and with the chemical experience of other parts of the Group is evident.

As to hospital supplies, during the past three years a number of new products were developed in quick succession: a system for kidney dialysis, an instrument for the visualization of the movement of the heart (*Echo Cardio Visor*<sup>®</sup>) and a new type of X-ray table.

R&D will concentrate on further improvement and extension of the product line.

### Consumer products

We are mainly involved in the continuous monitoring of consumer needs and the development of products which usefully fill these needs. Mostly we use existing and generally available ingredients, but in a few cases entirely new formulations are developed. Thus, in many years of research, we arrived at products for dental and mouth hygiene based on an

essentially new operating principle. Further developments will be determined by the results of clinical investigations.

We are continuing to investigate possibilities of reducing the phosphate content of our detergents without impairing their cleaning and textile-saving properties. Possible solutions to this problem have recently appeared on the horizon, but we expect that a large-scale effective and economic replacement of phosphates in detergents will still take a number of years.

For the manufacture of tissue paper a new machine will soon come into operation. The process it utilizes is based on a new principle, resulting in products with relatively greater softness and absorbing capacity. Our R&D in Sweden has developed an important new technique for the recirculation of the process water of paper mills, whereby more fiber material is recovered for re-use and waste water pollution is minimized.

### Miscellaneous products

To illustrate our R&D in this diversified sector, we choose the interesting example of our engineering plastics. In this area, research emphasis is on the development of polymer types for the manufacture of high-grade, mainly technical, products. Our *Akulon*<sup>®</sup> (polyamide 6 and 6.6) and *Arnite*<sup>®</sup> (polyester) grades have successfully opened up a broad range of engineering applications. Our development of block copolymers based on thermoplastic polyester has led to such products as *Arlastic*<sup>®</sup>, a high-grade elastomer for use in the rubber, plastics and other industries.

Another interesting project concerns the use of a special polyester grade for the molding of bottles for carbonated beverages.

### Corporate Research (CR)

This institution originated from a number of fiber R&D sections which were historically discipline-oriented rather than product-oriented. After four years of operation, the record demonstrates a general recognition by, and a high degree

of interaction with, the product groups. Thus the initial objectives of CR – to provide for high-quality basic research and for support of the divisional R&D by means of modern methods – have helped to introduce an informal binding element into the relationship between the various divisional R&D activities.

CR's basic research has in part been directed at investigating a number of topics of general interest to the Group, e.g. the function of antioxidants and flame retardants in plastics, the characterization of polymer materials, reaction kinetics, permeation through membranes, adhesion phenomena, rheology, etc.

In addition, a considerable part of basic research is exploratory, mainly in the areas of synthetic organic chemistry and polymer chemistry. The fruitful links with the specialty chemicals and coatings developments have been mentioned earlier.

CR's methodological research comprises chemical and instrumental analysis, material sciences, applied physics and informatics, applied mathematics and pollution control methods. The divisional R&D centers do not in general have advanced experience in these fields, and thus, considerable support from CR is required.

Occasionally, an invention realized at CR bears no relation to our existing operations. For example, a method was found for electroplating by which small plastic particles are dispersed in the metal layer formed. The interesting properties obtained (e.g. in a system of nickel – fluorocarbon polymers) are being further evaluated with the help of the Corporate Business Development department with an eye to possible applications by other companies.

As a result of CR's activities, and in particular of the close cooperation of our patent office with the divisional R&D units, we have strengthened our patent position in a broad field.

### Future aspects of the R&D function

In view of the diversity of R&D in the different parts of our Group, we can only broadly survey the developments to come. No doubt, many deviations will occur from the general trends we see now as being determinative of the future shape of the R&D function.

We regard the adequate provision of a still growing world population under the threat of a – relatively increasing – shortage of natural resources as the most essential aspect of the future. In the industrially developed parts of the world, with a dense and fairly stable population, many have become aware of the hazards of environmental pollution, and of the possible undesired and unforeseen effects which existing and new industrial activities and products may have on society.

If, in the system of free enterprise, a Group such as ours aspires to retain its

position, while at the same time wanting to make the essential changes which are necessary in our view of the problems of the future, a considerable appeal has to be made to the ingenuity of the entire Group, including R&D. The main task will be to continue to fulfill needs which are considered to be essential, and to do so in a generally accepted way. This has to be accomplished in a climate where science and technology can no longer rely on a simplistic faith in progress for their continuing existence. It is true that therefore science and technology will become less conspicuous as initiators of innovation, but on the other hand our scientific and technical skills will be needed more than ever in order to help solve the problems we see before us. Hence, we feel that a considerable decrease in industrial R&D can never be in the interest of either the Group or society. We will continue to require significant contributions from R&D. The character of these

contributions may become less spectacular or less glorious, but they might well be of essential importance to the Group, which finds itself in a changing and ever more complex society.

In light of these changing circumstances, the main requirements for our R&D function are:

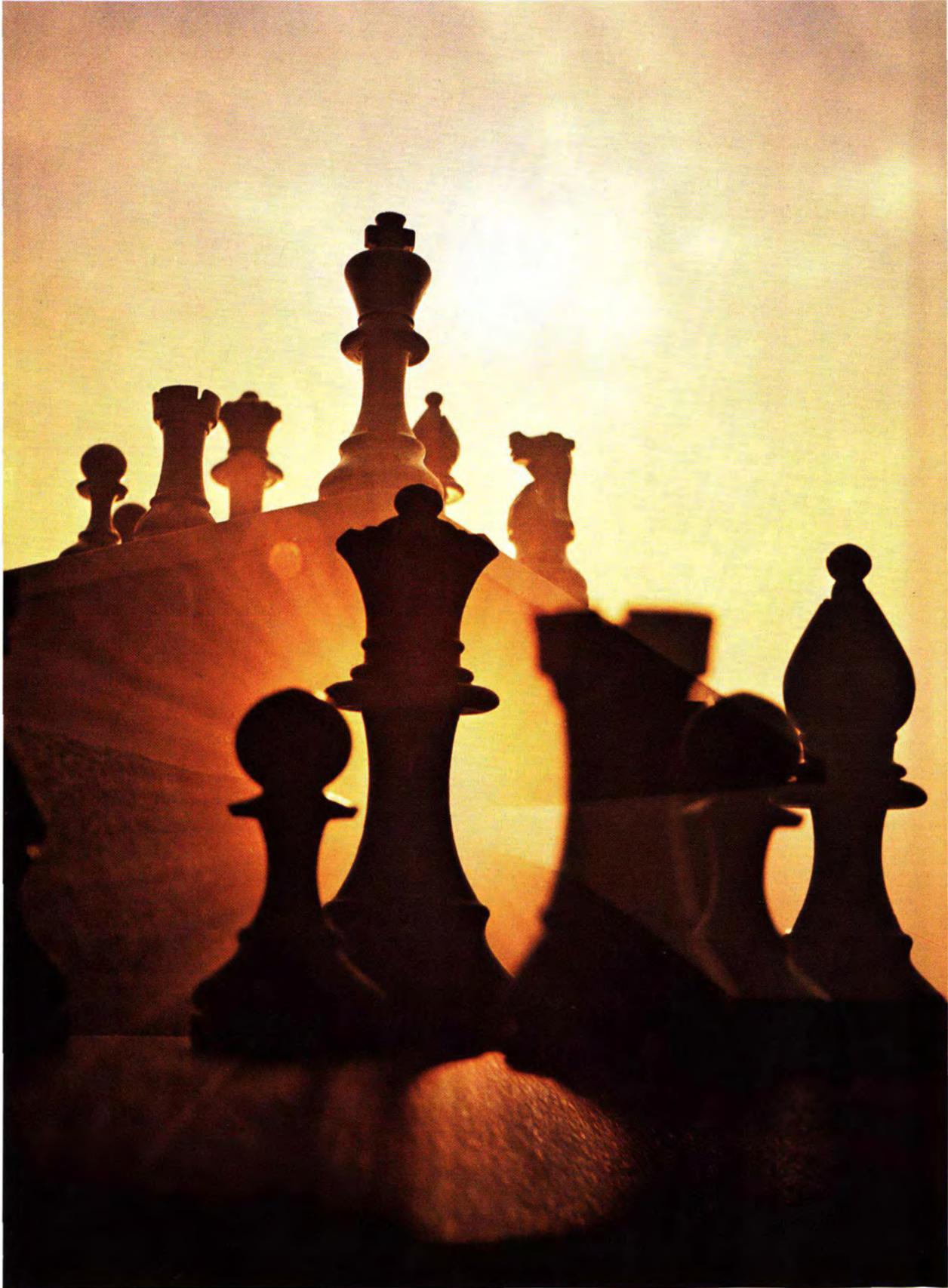
- maintenance of the high standard of professional skill needed for solving real problems;
- firmer integration of R&D into all other aspects of the business;
- fuller participation in strategy and planning, in particular with respect to the interaction between technical and social developments;
- readiness to cooperate with (research) institutions outside the Group where this can be mutually beneficial.

R&D management will be expected to promote the effectiveness of R&D by maintaining a consistent philosophy with respect to this function, and by putting forth a style of management which motivates the staff toward a creative contribution to the Group's continued existence and development.



*'...moving to turn new ideas to advantage...'*

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### Principles of consolidation

The consolidated financial statements include Akzo N.V. and all companies in which Akzo N.V. or any of its majority subsidiaries has an interest, directly or indirectly, of more than 50% of the outstanding capital stock. 100% of the assets, the liabilities and the results of the consolidated companies are included. Minority interest in Group equity and in Group income (loss) is shown separately. The principal affiliated companies are listed on pages 52 and 53. A list of names and registered offices of affiliates, drawn up in conformity with article 14, paragraph 2, and using article 14, paragraph 3, subpara a, of the Dutch Corporations' Financial Statements Law ('Wet op de Jaarrekening van Ondernemingen'), has been filed at the Trade Registry of Arnhem.

### Principles of valuation and determination of income

The valuation principles for property, plant and equipment, investments in non-consolidated companies, other non-current assets, inventories, securities included in cash and marketable securities, and provisions are stated separately in the notes to the consolidated balance sheet.

Receivables, cash and liabilities are stated at face amounts, less such provisions for receivables as are deemed necessary. The parts of long-term receivables and long-term debt becoming due within one year are

included under short-term receivables and other current liabilities, respectively.

Intangible assets, which include exploitation rights, are not capitalized; they are charged against operating income. Paid goodwill is charged directly against Group equity.

In the consolidated balance sheet, amounts in foreign currencies have been translated into guilders at rates virtually equal to the rates of exchange in force at year's end, except for the U.S. dollar convertible debentures, whose valuation in guilders is based on a rate of U.S. \$ 1 = Hfl 3.60. In the consolidated statement of income, foreign currencies have been translated into guilders at rates of exchange fixed for each quarter as typical of the rates then applicable.

Foreign exchange differences are included in operating income, except for foreign exchange differences resulting from translation into guilders, at changed exchange rates, of stockholders' equities of companies outside the Netherlands; the latter differences are directly added to, or deducted from, Group equity.

### Effect of price rises on Group equity and income

The principles of valuation and determination of income used in the consolidated financial statements shown on pages 38 through 45 are based on historical cost. The effect of price rises on Group equity and income is shown on pages 46 and 47.

## Consolidated balance sheet of the Akzo group

after allocation of profit (1974) and loss (1975); see notes on pages 41 through 44

38	in Hfl 1,000	December 31, 1975	December 31, 1974
	non-current assets		
	property, plant and equipment	4,396,410	4,322,095
	investments in non-consolidated companies	307,211	285,115
	other non-current assets	<u>124,725</u>	<u>175,303</u>
		4,828,346	4,782,513
	current assets		
	inventories	2,113,053	2,561,736
	short-term receivables	1,905,459	1,830,974
	prepaid expenses	51,022	55,712
	cash and marketable securities	<u>538,883</u>	<u>524,185</u>
		4,608,417	4,972,607
	total assets	9,436,763	9,755,120
	Group equity		
	Akzo N.V. stockholders' equity	2,983,975	3,474,088
	minority interest in Group equity	<u>541,168</u>	<u>564,947</u>
		3,525,143	4,039,035
	long-term liabilities		
	provisions	1,051,316	957,817
	long-term debt	<u>2,693,122</u>	<u>2,124,557</u>
		3,744,438	3,082,374
	current liabilities		
	bank borrowings and overdrafts	308,491	410,293
	other current liabilities	<u>1,858,691</u>	<u>2,223,418</u>
		2,167,182	2,633,711
	total Group equity and liabilities	9,436,763	9,755,120

## Consolidated statement of income of the Akzo group

see notes on pages 44 and 45

in Hfl 1,000	1975	1974	39
sales	9,716,865	10,760,718	
operating costs			
salaries, wages and social charges	3,109,080	3,143,932	
depreciation	518,867	530,506	
other costs	<u>6,106,211</u>	<u>6,314,424</u>	
	<u>9,734,158</u>	<u>9,988,862</u>	
operating income (loss)	(17,293)	771,856	
interest	<u>234,236</u>	<u>146,556</u>	
	(251,529)	625,300	
taxes on operating income and interest	<u>(58,448)</u>	<u>226,099</u>	
	(193,081)	399,201	
equity in earnings of non-consolidated companies	<u>12,686</u>	<u>41,732</u>	
Group income (loss) before extraordinary items	(180,395)	440,933	
extraordinary items	<u>(252,562)</u>	<u>8,149</u>	
Group income (loss)	(432,957)	449,082	
of which minority interest	6,693	68,991	
Akzo N.V. net income (loss)	(439,650)	380,091	
net income (loss) before extraordinary items	(193,246)	371,942	
extraordinary items	(252,562)	8,149	
of which minority interest	<u>(6,158)</u>	<u>-</u>	
	<u>(246,404)</u>	<u>8,149</u>	
Akzo N.V. net income (loss)	(439,650)	380,091	
net income (loss) before extraordinary items, per share of common stock, par value Hfl 20 per share, in Hfl	(6.53)	12.55	
net income (loss) per share of common stock, par value Hfl 20 per share, in Hfl	(14.86)	12.83	

## Consolidated statement of changes in financial position of the Akzo group

see notes on page 45

40	in Hfl million	1975	1974*
<hr/>			
	working capital (excess of current assets over current liabilities) at January 1	2,339	2,226
<hr/>			
	<b>source of funds</b>		
	Group income (loss)	(433)	449
	charges to income not requiring funds:		
	depreciation	519	531
	disinvestments	151	33
	provisions	95	(8)
	retained earnings of non-consolidated companies	12	(12)
	sundries	26	31
		<u>803</u>	<u>575</u>
	funds from operations	370	1,024
	disposal of participations	3	7
	aggregate borrowings	826	422
	issuance of stock by Group companies	14	13
	funds retained through payment of Akzo N.V. final 1973 dividend in stock	-	72
		<u>843</u>	<u>514</u>
		1,213	1,538
<hr/>			
	<b>application of funds</b>		
	expenditures for property, plant and equipment	745	799
	new participations	51	64
	working capital of new participations	7	23
		<u>44</u>	<u>41</u>
	investments in non-consolidated companies	48	24
	other non-current assets	(43)	20
		<u>794</u>	<u>884</u>
	redemptions on borrowings	277	306
	dividends paid to:		
	stockholders of Akzo N.V.	-	118
	minority stockholders of Group companies	21	26
		<u>21</u>	<u>144</u>
	miscellaneous	19	91
		<u>1,111</u>	<u>1,425</u>
<hr/>			
	working capital at December 31	2,441	2,339
<hr/>			
	increase (decrease) in components of working capital:		
	inventories	(449)	921
	short-term receivables	74	(123)
	prepaid expenses	(5)	4
	cash and marketable securities	15	(316)
	increase (decrease) in current assets	<u>(365)</u>	<u>486</u>
	bank overdrafts	(102)	248
	other current liabilities	(365)	125
	increase (decrease) in current liabilities	<u>(467)</u>	<u>373</u>
	increase in working capital	102	113

\* restated for comparison

# Notes to the consolidated financial statements of the Akzo group

## Consolidated balance sheet

### Property, plant and equipment

Land is stated at cost with a revaluation, however, at January 1, 1969, of approximately Hfl 70 million for land acquired long ago. Other property, plant and equipment are stated at cost, less depreciation.

Depreciation is calculated by the straight-line method based on estimated life. In cases where the book value calculated in this way exceeded the working value, additional write-offs were made.

in Hfl 1,000	cost of acquisition	book value
situation at December 31, 1974:		
land	227,271	227,271
buildings	1,940,350	1,165,186
plant equipment and machinery	7,046,293	2,799,502
means of transport	119,464	48,363
assets not used in the production process	202,484	81,773
	<u>9,535,862</u>	<u>4,322,095</u>

### changes in 1975:

changes due to acquisition and disposal of consolidated companies	(84,823)	(53,640)
capital expenditures	745,052	745,052
disinvestments	(170,613)	(150,977)*
depreciation	-	(518,867)
foreign exchange differences	65,275	34,745
other changes	<u>22,420</u>	<u>18,002</u>
	<u>577,311</u>	<u>74,315</u>

\* including the provision for additional write-offs mentioned on page 45

### situation at December 31, 1975:

land	234,465	234,465
buildings	2,063,972	1,198,361
plant equipment and machinery	7,486,325	2,837,242
means of transport	126,459	46,326
assets not used in the production process	201,952	80,016
	<u>10,113,173</u>	<u>4,396,410</u>

projects under construction, included in cost of acquisition and book value:

at December 31, 1974	395,491
at December 31, 1975	528,894
purchase commitments (not included in consolidated balance sheet):	
at December 31, 1974	343,019
at December 31, 1975	226,014

## Investments in non-consolidated companies

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This item includes the non-consolidated companies and the loans to these companies. Investments in non-consolidated companies are stated at the amount of Akzo's share in stockholders' equity, at December 31, 1975 less provisions in the amount of Hfl 18 million. The calculation of stockholders' equity has been based as much as possible on the Akzo principles of valuation.

in Hfl 1,000

situation at December 31, 1974	264,256
changes in participation	83,389
equity in 1975 earnings	15,643
dividends received	(27,928)
foreign exchange differences	(47,072)
other changes	<u>6,426</u>
situation at December 31, 1975	294,714
loans at December 31, 1975	12,497
(at December 31, 1974: 20,859)	
	<u>307,211</u>

### Other non-current assets

This item includes mainly long-term receivables and other assets that are not directly realizable. The latter are stated at cost or estimated value, whichever was lower.

### Inventories

Inventories are stated at cost or market value, whichever was lower. Provisions have been made for obsolescence and other risks.

In the valuation of inventories, profits arising as a result of transactions between consolidated companies have been eliminated.

in Hfl 1,000	Dec. 31, 1975	Dec. 31, 1974
raw materials and supplies	701,953	897,445
work in process	537,487	556,340
finished goods	<u>873,613</u>	<u>1,237,951</u>
	<u>2,113,053</u>	<u>2,691,736</u>
special provision	-	130,000
	<u>2,113,053</u>	<u>2,561,736</u>

In view of the sharp decrease in inventories in 1975, the special Hfl 130 million provision made at December 31, 1974 was restored to income.

**Short-term receivables**

in Hfl 1,000	Dec.31,1975	Dec.31,1974
trade receivables	1,876,837	1,731,888
receivables from non-consolidated companies	48,921	42,001
other receivables	298,594	347,302
	<u>2,224,352</u>	<u>2,121,191</u>
of which discounted	318,893	290,217
	<u>1,905,459</u>	<u>1,830,974</u>

**Cash and marketable securities**

With few exceptions, securities included in this item are listed on stock exchanges. They are stated at cost or market value, whichever was lower.

The securities include 81,832 shares of Akzo N.V. common stock acquired in 1972, which are stated at market value at December 31, 1975.

in Hfl 1,000	Dec.31,1975	Dec.31,1974
securities	22,086	39,742
short-term investments	298,844	254,381
cash on hand and in banks	217,953	230,062
	<u>538,883</u>	<u>524,185</u>

**Group equity**

in Hfl 1,000	capital stock	capital surplus, paid in	retained earnings	other reserves	stockholders' equity	minority interest	Group equity
situation at December 31, 1974	592,760	657,991	1,993,355	229,982	3,474,088	564,947	4,039,035
issuance of stock of Group companies to third parties						14,011	14,011
purchase of cumulative preferred stock	(80)			32	(48)		(48)
goodwill resulting from acquisitions of companies*			(27,562)		(27,562)	(7,259)	(34,821)
1975 Group loss			(439,650)		(439,650)	6,693	(432,957)
dividends paid to minority stockholders of Group companies						(21,326)	(21,326)
change in exchange rates				(47,725)	(47,725)	14,624	(33,101)
other changes			26	24,846	24,872	(30,522)	(5,650)
situation at December 31, 1975	<u>592,680</u>	<u>657,991</u>	<u>1,526,169</u>	<u>207,135</u>	<u>2,983,975</u>	<u>541,168</u>	<u>3,525,143</u>

\* including restatements for prior years

At least Hfl 210 million of the capital surplus, paid in (at December 31, 1974: Hfl 210 million), can be considered free from income tax within the meaning of the Dutch 1964 Income Tax Law ('Wet op de Inkomstenbelasting 1964').

**Provisions**

This item comprises provisions which do not refer to specific assets.

in Hfl 1,000	Dec.31,1975	Dec.31,1974
deferred taxes	382,697	453,358
pension rights	287,183	265,128
other provisions	381,436	239,331
	<u>1,051,316</u>	<u>957,817</u>

**Provisions for deferred taxes**

This item comprises the tax liabilities, less the part expected to be settled in 1976. These liabilities have in general not been discounted to present value.

The decrease in these provisions relates to taxes deducted from the losses incurred in 1975.

See also the notes to taxes on income (page 45).

*Provisions in respect of pension rights*

With due observance of the statutory regulations and customs in the countries concerned, most Group companies have arranged appropriate pension schemes for their employees.

The present value of the ensuing liabilities is largely covered by:

– provisions, in the aggregate amount of Hfl 287 million, made by Group companies in their balance sheets;

– the funds accumulated in independent pension funds through payment of contributions.

The present value of the pension benefits not yet covered is

approximately Hfl 120 million (at December 31, 1974:

approximately Hfl 120 million).

*Other provisions*

This item includes provisions for liabilities whose extent cannot be ascertained with accuracy, and provisions for various operating risks, including self-insurance. The amounts of the provisions are fixed in relation to the liabilities and risks concerned. The increase is principally due to provisions, in the aggregate amount of Hfl 129 million, made in 1975 for rationalization of operations (see note to extraordinary items, page 45).

**Long-term debt**

in Hfl 1,000	Dec. 31, 1975	Dec. 31, 1974
convertible debentures	252,000	252,000
other debentures	497,949	411,765
private borrowings	1,872,459	1,555,489
other long-term debts	351,697	215,748
	<u>2,974,105</u>	<u>2,435,002</u>
part becoming due within one year	280,983	310,445
	<u>2,693,122</u>	<u>2,124,557</u>

Private borrowings and other long-term debts have been secured to an aggregate amount of Hfl 528 million (at December 31, 1974: Hfl 458 million) by means of mortgages, etc.

The average interest rate of the debentures and private borrowings is 7.7% (1974: 7.8%).

Redemption on the other debentures and private borrowings will occur:

in 1976	Hfl 194 million
during the years 1977 through 1981	Hfl 1,328 million
during the years 1982 through 1986	Hfl 553 million
after 1986	<u>Hfl 295 million</u>
	<u>Hfl 2,370 million</u>

The breakdown by country of the other debentures and private borrowings is shown in the following table.

	situation at Dec. 31, 1974		situation at Dec. 31, 1975	
in Hfl 1,000		increase	decrease*	
Group companies in:				
the Netherlands	1,137,962	367,036	136,056	1,368,942
West Germany	247,161	87,302	54,069	280,394
United States	375,664	71,151	(18,247)	465,062
other countries	206,467	119,477	69,934	256,010
	<u>1,967,254</u>	<u>644,966</u>	<u>241,812</u>	<u>2,370,408</u>

\* including the effect of alterations in exchange rates

*Convertible debentures*

in Hfl 1,000

U.S. \$ 70 million principal amount of 4 $\frac{3}{4}$ % debentures Akzo N.V. 1969 convertible into Akzo N.V. common stock. These debentures mature not later than 1989. The conversion price is the same as at December 31, 1974 and is Hfl 127.10 per share of Hfl 20 par value, based on an exchange rate of U.S. \$1 = Hfl 3.60. The valuation of these debentures in guilders is based on the same exchange rate.

Redemption at par occurs in 10 equal annual installments, which will become due in the years 1980 through 1989. Full or partial accelerated redemption is permitted.

This borrowing includes the debentures held available for exchange of the remaining 4 $\frac{3}{4}$ % convertible debentures Zout-Organon B.V. of U.S. \$ 1,000 each; 81 of these debentures have not been exchanged. 252,000

*Other debentures*

in Hfl 1,000

Currently outstanding principal amount of 4 $\frac{1}{2}$ % debentures Akzo N.V. 1962. These debentures are redeemable in 13 equal annual installments, the first of which became due on July 1, 1968.

Accelerated redemption is permitted. 6,854

Sfr 50 million principal amount of 5 $\frac{1}{2}$ % debentures Akzo N.V. 1967. These debentures are redeemable in 5 equal annual installments, the first of which will become due on July 31, 1978.

Accelerated redemption is permitted. 51,300

Sfr 60 million principal amount of 6 $\frac{3}{4}$ % debentures Akzo N.V. 1970. These debentures are redeemable in 6 equal annual installments, the first of which will become due on September 15, 1980.

Accelerated redemption is permitted. 61,560

to be carried forward

119,714

carried forward

119,714

Currently outstanding principal amount of 11¼% debentures Akzo N.V. 1974. These debentures are redeemable in 10 approximately equal annual installments, the first of which became due on November 1, 1975.

Accelerated redemption is not permitted.

67,493

Sfr 60 million principal amount of 7¾% debentures Akzo N.V. 1975. These debentures will be redeemed in 7 annual installments of Sfr 2 million each in the years 1979 through 1985 and in 4 annual installments of Sfr 4 million each in the years 1986 through 1989. The remaining principal amount will be redeemable at May 9, 1990.

Accelerated redemption is permitted as from May 9, 1981.

61,560

Profit-sharing employee debentures Akzo N.V.

5,465

Total other debentures Akzo N.V.

254,232

Currently outstanding principal amount of 6% debentures Koninklijke Zout-Ketjen 1965. These debentures are redeemable in 10 equal annual installments, the first of which became due on December 1, 1971.

Accelerated redemption is permitted through 1979.

25,000

Currently outstanding principal amount of 4½% debentures Akzo Pharma B.V. 1961. These debentures are redeemable in 15 annual installments of Hfl 1 million each, in the years 1967 through 1981.

Accelerated redemption is permitted.

6,000

Other debentures issued by consolidated companies.

212,717

497,949

#### Other current liabilities

in Hfl 1,000

Dec. 31, 1975

Dec. 31, 1974

suppliers	716,379	814,294
non-consolidated companies	23,978	25,325
taxes on income	49,814	83,451
dividend relating to financial year	-	118,029
redemptions on borrowings	280,983	310,445
pensions	8,821	24,366
other liabilities and accrued charges	778,716	847,508
	1,858,691	2,223,418

#### Liabilities not shown in the balance sheet

With regard to non-consolidated companies and third parties, guarantees were given and liabilities contracted to an aggregate amount of Hfl 241 million (at December 31, 1974: Hfl 228 million), of which Hfl 185 million (at December 31, 1974: Hfl 139 million) direct by Akzo N.V.

In respect of leasehold, rent, etc., liabilities have been contracted for a number of years to an amount of approximately Hfl 31 million (at December 31, 1974: approximately Hfl 15 million) per year.

#### Consolidated statement of income

##### Sales

61,560

This item includes the total of amounts invoiced to third parties in respect of goods supplied and services rendered, less sales taxes and excise duties.

##### Depreciation

in Hfl 1,000

1975

1974

buildings	63,756	64,333
plant equipment and machinery	434,487	442,924
means of transport	16,054	17,022
assets not used in the production process	4,570	6,227
	518,867	530,506

For the method of calculation of depreciation, see page 41.

##### Operating income (loss)

The inventory profits included in this item total Hfl 148 million (1974: Hfl 260 million). These profits have been calculated on the basis of the inventory level deemed normal for operations. The special Hfl 130 million provision, which had been deducted from inventory profits in 1974, was added in 1975.

##### Interest

in Hfl 1,000

1975

1974

interest paid	270,197	234,612
interest received, including income from securities, etc.	35,961	88,056
	234,236	146,556

**Taxes on income**

The taxes on earnings included in this item comprise current and deferred tax liabilities. From the losses incurred, taxes have been deducted to the extent that they can be offset against taxes charged to income in previous years. No deduction for taxes has been made in respect of the extraordinary item of Hfl 250 million for rationalization costs concerning the Enka Glanzstoff group. The taxes included in Group loss (1974: Group income) break down as follows:

in Hfl 1,000	1975	1974
taxes on:		
operating income (loss)	38,126	298,195
interest	(96,574)	(72,096)
balance	(58,448)	226,099
taxes on equity in earnings of non-consolidated companies	4,424	3,661
taxes included in extraordinary items	(6,566)	(40,129)
	(60,590)	189,631

**Equity in earnings of non-consolidated companies**

Under this heading are included the Group's equity in earnings of non-consolidated companies and interest received on loans granted to these companies, taking into account taxes on these items.

**Extraordinary items**

This item comprises important but isolated gains and losses not relating to normal operations; the taxes concerned have been taken into account.

See also the note to taxes on income.

in Hfl 1,000	1975	1974
extraordinary gains	12,512	32,627
extraordinary losses	265,074	24,478
	(252,562)	8,149

1975 extraordinary losses almost entirely relate to the formation of provisions for rationalization of operations; Hfl 250 million of these provisions concerns the Enka Glanzstoff group. Of the aggregate amount of Hfl 265 million, Hfl 136 million has been provided for additional write-offs in respect of property, plant and equipment and Hfl 129 million has been added to other provisions.

**Net income (loss) per share of common stock**

Net income per share of common stock is calculated by dividing net income, less the dividend on priority and cumulative preferred stock and the bonus to the supervisory council, by the number of shares of common stock outstanding at December 31.

Net loss per share of common stock is calculated by dividing net loss by the number of shares of common stock outstanding at December 31.

**Consolidated statement of changes in financial position**

In addition to the items specifically recognized under source of funds and application of funds, the changes in non-current assets, Group equity and long-term liabilities comprise:

- the effect of consolidation or de-consolidation of existing interests as a result of changes in participation;
- valuation differences arising from translation into guilders of the 1974 and 1975 year-end balance sheet amounts of foreign non-consolidated companies at the rates of exchange in force at December 31 of the years concerned.

The effect of these factors on working capital is accounted for in the item 'miscellaneous'. In 1975 and 1974, it reduced working capital by Hfl 18 million and Hfl 85 million, respectively.

The statement separately shows funds relating to new participations and disposal of participations.

## Effect of price rises on Group equity and income

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Due to continued inflation in virtually all countries, the current value of property, plant and equipment and of investments in non-consolidated companies, and therefore of Group equity, is higher than is shown in the consolidated balance sheet. Operating income and net income are lower if operating costs are determined in relation to current prices. Although to date no generally

accepted method is available to show the effects of price rises on Group equity and income, we have endeavored to calculate these effects in the manner set forth below. The 1974 figures which are stated for comparison differ from the approximations included in our 1974 annual report.

### Condensed consolidated balance sheet

in Hfl million	December 31, 1975		December 31, 1974	
	on the basis of historical cost	on the basis of current value	on the basis of historical cost	on the basis of current value
property, plant and equipment	4,396	5,696	4,322	5,272
investments in non-consolidated companies	307	357	285	330
other non-current assets	125	125	175	175
non-current assets	4,828	6,178	4,782	5,777
current assets	4,609	4,609	4,973	4,973
total assets	9,437	10,787	9,755	10,750
Akzo N.V. stockholders' equity	2,984	3,585	3,474	3,928
minority interest	541	640	565	631
Group equity	3,525	4,225	4,039	4,559
provisions	1,052	1,702	958	1,433
long-term debt	2,693	2,693	2,124	2,124
current liabilities	2,167	2,167	2,634	2,634
total Group equity and liabilities	9,437	10,787	9,755	10,750

Current value has been calculated at 1975 and 1974 prices, respectively.

### Changes in stockholders' equity in 1975

in Hfl million

stockholders' equity on a current-value basis at December 31, 1974		3,928
1975 net loss before extraordinary items	(342)	
extraordinary items	(246)	
goodwill resulting from acquisitions of companies	(28)	
increase in value of inventories	77	
reevaluation of property, plant and equipment and of investments in non-consolidated companies, and effect of changes in exchange rates	196	
stockholders' equity on a current-value basis at December 31, 1975		3,585

Operating income (loss) and Akzo N.V. net income (loss) before extraordinary items	1975		1974	
	operating income (loss)	net income (loss) before extra- ordinary items	operating income (loss)	net income (loss) before extra- ordinary items
in Hfl million				
income (loss) on the basis of historical cost	(17)	(193)	772	372
difference between current cost and historical cost in respect of:				
inventories	(148)	(77)	(260)	(110)
depreciation on property, plant and equipment	(150)	(65)	(110)	(45)
equity in earnings of non-consolidated companies		(7)		(6)
income (loss) at 1975 and 1974 prices, respectively	(315)	(342)	402	211
<b>Financial ratios</b>				
	on the basis of historical cost	1975 on the basis of current value	on the basis of historical cost	1974 on the basis of current value
Group equity : liabilities	0.60	0.64	0.71	0.74
stockholders' equity per share of common stock, par value Hfl 20 per share, in Hfl	100.80	121.14	117.36	132.73
net income (loss) before extraordinary items per share of common stock, par value Hfl 20 per share, in Hfl	(6.53)	(11.56)	12.55	7.13
as percentage of stockholders' equity	(6.5)	(9.5)	10.7	5.4
operating income (loss) as percentage of sales	(0.2)	(3.2)	7.2	3.7

#### Method of calculation

The current value of land has generally been approximated on the basis of appraisals.

To calculate the current value of buildings, machinery and equipment, indexes from external sources in the principal countries of establishment were used. Additionally, a decrease in value as a result of technological advances was taken into account; this decrease was estimated at an average of 1% annually for buildings and of 2% annually for machinery and equipment.

In cases where the current value thus calculated exceeded the working value, the latter value was used. As a consequence, a major part of Enka Glanzstoff's buildings, machinery and equipment (including all property, plant and equipment for the production of chemical fibers for textile uses) was not revalued, neither at December 31, 1975 nor at December 31, 1974.

For non-consolidated companies, an overall revaluation was made on the basis of the current value of their property, plant and equipment.

For inventories, no revaluation was made, as the value shown in the consolidated balance sheet does not differ materially from the current value of inventories.

Stockholders' equity on a current-value basis has been determined by adding to stockholders' equity as shown in the consolidated balance sheet, the amount of the revaluation of property, plant and equipment and of investments in non-consolidated companies, less the relevant deferred taxes and minority interest.

Operating income (loss) at current prices has been calculated by deducting from (adding to) the operating income (loss) shown in the consolidated statement of income:

- the inventory profits relating to the normal inventory level;
- the increase in the amount of depreciation, if depreciation is calculated on the current value of property, plant and equipment.

Net income (loss) before extraordinary items, at current prices, has been calculated by deducting from (adding to) the net income (loss) before extraordinary items shown in the consolidated statement of income:

- the afore-mentioned inventory profits and the increase in depreciation, less the relevant taxes and minority interest;
- the effect of the increase in depreciation on property, plant and equipment on equity in earnings of non-consolidated companies.

## Akzo N.V. balance sheet

after allocation of profit (1974) and loss (1975); see notes on page 50

48	in Hfl 1,000	December 31, 1975	December 31, 1974
<hr/>			
	affiliated companies		
	consolidated companies	3,189,617	3,748,958
	non-consolidated companies	121,816	77,870
	loans to affiliated companies	<u>1,057,854</u>	<u>960,020</u>
		4,369,287	4,786,848
	short-term receivables and prepaid expenses		
	receivables from affiliated companies	50,719	40,168
	other receivables	43,798	40,735
	prepaid expenses	<u>14,538</u>	<u>11,378</u>
		109,055	92,281
	cash and marketable securities		
	marketable securities	3,642	4,010
	short-term investments	232,895	178,288
	cash on hand and in banks	<u>47,047</u>	<u>37,814</u>
		283,584	220,112
<hr/>			
	total assets	4,761,926	5,099,241
	stockholders' equity		
	common stock	591,872	591,872
	cumulative preferred stock	760	840
	priority stock	48	48
	capital stock	<u>592,680</u>	<u>592,760</u>
	capital surplus, paid in	657,991	657,991
	retained earnings	1,526,169	1,993,355
	other reserves	<u>207,135</u>	<u>229,982</u>
		2,983,975	3,474,088
	borrowings		
	convertible debentures	252,000	252,000
	other debentures	254,232	197,879
	private borrowings	886,862	655,380
	borrowings from affiliated companies	<u>233,986</u>	<u>306,568</u>
		1,627,080	1,411,827
	current liabilities		
	dividend relating to financial year	-	118,029
	amounts due to affiliated companies	81,133	14,780
	other liabilities and accrued charges	<u>69,738</u>	<u>80,517</u>
		150,871	213,326
<hr/>			
	total stockholders' equity and debts	4,761,926	5,099,241

## Akzo N.V. statement of income

see notes on page 50

in Hfl 1,000	1975	1974	49
net income (loss) before extraordinary items	(193,246)	371,942	
extraordinary items	<u>(246,404)</u>	<u>8,149</u>	
net income (loss)	(439,650)	380,091	
reservation, pursuant to art. 38, para 2, of the articles of association, deemed necessary to counteract the effect of price rises of assets		<u>170,000</u>	
profit available for allocation pursuant to the provisions of the articles of association		210,091	

The 1975 net loss has been charged against the retained earnings account.

Arnhem, March 25, 1976

the board of management:

G. Kraijenhoff  
S. C. Bakkenist  
H. J. Schlange-Schöningen  
B. Zevenbergen  
A. G. van den Bos  
H. van Doodewaerd  
A. van Driel  
J. van den Driest  
H. Kramers  
D. W. van Krevelen  
H. J. Kruisinga  
J. Veldman  
J. A. Wolhoff  
H. G. Zempelin

the supervisory council:

J. R. M. van den Brink  
H. M. van Mourik Broekman  
P. M. H. van Boven  
P. M. van Doormaal  
H. L. Merkle  
Y. Scholten  
K. Schudel-van Zwanenberg  
K. Soesbeek  
W. F. G. L. Starrenburg  
F. H. Ulrich  
L. Vaubel  
J. de Vries  
O. Wolff von Amerongen

## Notes to Akzo N.V. balance sheet and statement of income

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### General

The investments in affiliated companies, as well as the other assets and liabilities, have been valued, and income has been determined, in accordance with the principles of valuation and determination of income mentioned on page 37. Thus stockholders' equity and net income (loss) are equal to stockholders' equity and net income (loss) as shown in the consolidated financial statements on pages 38 and 39.

### Non-consolidated companies

in Hfl 1,000

situation at December 31, 1974	77,870
changes in participation	49,904
equity in 1975 earnings	4,588
dividends received	(6,596)
foreign exchange differences	(1,565)
other changes	(2,385)
<hr/>	
situation at December 31, 1975	121,816

### Capital stock

Authorized capital stock of Akzo N.V. is Hfl 1,030,048,000 and consists of 48 shares of priority stock, par value Hfl 1,000 per share, 30,000 shares of cumulative preferred stock, par value Hfl 1,000 per share, and 50 million shares of common stock, par value Hfl 20 per share.

Outstanding capital stock consists of 48 shares of priority stock, 760 shares of cumulative preferred stock and 29,593,586 shares of common stock (of which 81,832 shares of common stock are

held by the company). In 1975, 80 shares of cumulative preferred stock were purchased.

The priority stock is held by 'Akzostichting' (Akzo Foundation), which is controlled by the members of the supervisory council and the board of management.

### Borrowings

For information on the convertible and other debentures, see the notes to the consolidated financial statements (pages 43 and 44). The redemption plan for the private borrowings (average interest rate: 8.4%) is as follows:

in 1976	Hfl 102 million
during the years 1977 through 1981	Hfl 449 million
during the years 1982 through 1986	Hfl 267 million
after 1986	Hfl 69 million
	<hr/>
	Hfl 887 million

Borrowings from affiliated companies have no fixed redemption plan.

### Remuneration of supervisory council

For 1975, the members of the supervisory council were paid a total of Hfl 273,750, which consisted entirely of fixed remuneration.

For 1974, they were paid a total of Hfl 748,125, of which Hfl 285,625 was fixed remuneration and Hfl 462,500 was a bonus pursuant to art. 42 of the articles of association.

All members receive a remuneration.

At end-1975, the council numbered 13 (end-1974: 15) members.

## Auditors' report

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We have examined the foregoing 1975 financial statements of Akzo N.V., Arnhem. For the purpose of our examination we also have made use of the reports of other independent auditors with respect to a number of subsidiaries.

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In our opinion, these financial statements present fairly the financial position of Akzo N.V. at December 31, 1975, and the results of operations for the year then ended.

Arnhem, March 25, 1976

Klynveld Kraayenhof & Co.

# Principal companies of the Akzo group

March, 1976

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The operating companies are listed by division or Group company. Percentages of participation are only stated for companies in which Akzo N.V. holds a direct and/or indirect interest of less than 95%.

<b>Enka Glanzstoff, Arnhem / Wuppertal</b>	<b>Netherlands / W. Germany</b>		
<i>chemical fibers, non-wovens, plastics, synthetic leather, film, machinery and various industrial products</i>			
Enka Glanzstoff B.V., Arnhem	Netherlands		
Akzo Plastics B.V., Zeist	Netherlands		
Enka Glanzstoff AG, Wuppertal	W. Germany		
Barmag Barmer Maschinenfabrik AG, Remscheid-Lennep	W. Germany		
with establishments in Switzerland, U.S.A. and Brazil			
49 <sup>a</sup> - Fabelta N.V., Brussels	Belgium		
93 - Ferenka Ltd, Limerick	Rep. of Ireland		
Italenka S.p.A., Milan	Italy		
93 - Erste Österr. Glanzstoff-Fabrik AG, Vienna	Austria		
<b>Akzo International, Arnhem</b>	<b>Netherlands</b>		
<i>chiefly chemical fibers</i>			
62 - British Enkalon Ltd, Leicester	U.K.		
62 - Teesside Textiles Ltd, Thornaby/Stockton-on-Tees	U.K.		
37 <sup>b</sup> - Brand-Rex Ltd, Glenrothes	U.K.		
58 - La Seda de Barcelona S.A., Barcelona	Spain		
45 - Cyanenka S.A., Prat de Llobregat	Spain		
40 - Fibras Químicas S.A., Monterrey	Mexico		
40 - Petroquímica Sudamericana S.A., Buenos Aires	Argentina		
40 - Hilanderías Olmos S.A., Buenos Aires	Argentina		
40 - Hilanderías Beccar S.A., Buenos Aires	Argentina		
51 - Polyenka S.A., Indústria Química e Têxtil, São Paulo	Brazil		
45 - COBAFI Companhia Bahiana de Fibras S.A., Rio de Janeiro	Brazil		
48 - Enka de Colombia S.A., Medellin	Colombia		
49 - Enkador S.A., Quito	Ecuador		
44 - Century Enka Ltd, Calcutta	India		
29 - Nichemtex Industries Ltd, Lagos	Nigeria		
<b>Akzo Zout Chemie, Hengelo (O)</b>	<b>Netherlands</b>		
<i>salt and heavy chemicals</i>			
Akzo Zout Chemie Nederland B.V., Hengelo	Netherlands		
		Ned. Soda-industrie B.V., Delfzijl	Netherlands
		Petrochemie Delfzijl B.V., Delfzijl	Netherlands
		Zoutchemie Botlek B.V., Rotterdam	Netherlands
		50 - Methanol Chemie Ned. v.o.f., Delfzijl	Netherlands
		35 - Delamine B.V., Delfzijl	Netherlands
		Norddeutsche Salinen GmbH, Stade	W. Germany
		50 - Elektro-Chemie Ibbenb. GmbH, Ibbenbüren	W. Germany
		Konezo, div. of Akzo België N.V., Brussels	Belgium
		50 - Dansk Salt I/S, PR Mariager	Denmark
		87 - Comp. Ind. do Rio Grande do Norte (CIRNE), Macau	Brazil
		42 - Holland Electro Chemical Industries (Pty) Ltd, Johannesburg	South Africa
		<b>Akzo Chemie, Amersfoort</b>	<b>Netherlands</b>
		<i>specialty chemicals and industrial chemicals</i>	
		Akzo Chemie Nederland B.V., Amersfoort	Netherlands
		60 - Ketjen Carbon B.V., Rotterdam	Netherlands
		50 - Cyanamid-Ketjen Katalysator B.V., Amsterdam	Netherlands
		Akzo Chemie GmbH, Düren	W. Germany
		Woermann Chemische Baustoffe GmbH, Salzkotten	W. Germany
		with establishment in Switzerland	
		66 - Carbosulf Chemische Werke GmbH, Cologne	W. Germany
		Akzo Chemie, division of Akzo België N.V., Mons	Belgium
		Akzo Chemie France S.à.r.l., Compiègne	France
		Akzo Chemie Italia S.p.A., Arese	Italy
		Akzo Chemie U.K. Ltd, London	U.K.
		39 - Cailá y Parés S.A., Barcelona	Spain
		Interstab Chemicals Inc., N. Brunswick, New Jersey	U.S.A.
		48 - Poliquíma Indústria e Comércio S.A., São Paulo	Brazil
		50 - Nippon Ketjen K.K., Tokyo	Japan
		50 - Kayaku Noury K.K., Tokyo	Japan
		50 - Japan Interstab K.K., Tokyo	Japan
		50 - Lion Akzo Co. K.K., Tokyo	Japan
		50 - Akulu Chemicals (Pty) Ltd, Isithebe	South Africa
		<b>Akzo Coatings, Amstelveen</b>	<b>Netherlands</b>
		<i>paints, powder coatings, synthetic resins, adhesives and waxes</i>	
		Sikkens B.V., Sassenheim	Netherlands
		Kon. Talens B.V., Apeldoorn	Netherlands
		Kunstharsfabr. Synthese B.V., Bergen op Zoom	Netherlands
		Syntac B.V., Voorburg	Netherlands
		Sikkens GmbH, Emmerich	W. Germany

<sup>a</sup> participation: 49.6%

	K. G. Lesonal-Werke Chr. Lechler & Sohn Nachf., Stuttgart	W. Germany	Otarès B.V., Enschede	Netherlands
	with establishment in Austria		50 - Grada Produkten B.V., Amsterdam	Netherlands
50 -	Resicoat GmbH, Reutlingen	W. Germany	Recter B.V., Veenendaal	Netherlands
	Akzo Coatings Belgium N.V., Ternat	Belgium	Aerofako B.V., Apeldoorn	Netherlands
	Astral S.A., Paris	France	Kon. Eau de Colognefabriek J. C. Boldoot B.V., Amsterdam	Netherlands
	with establishments in Morocco <sup>c</sup> , Tunisia, Senegal <sup>c</sup> , Ivory Coast <sup>c</sup> and Cameroun <sup>c</sup>		Kon. Fabr. T. Duyvis Jz. B.V., Zaanstad	Netherlands
48 -	Dacral S.A., Paris	France	Kortman, division of Akzo België N.V., Brussels	Belgium
	Vercoloc S.p.A., Milan	Italy	50 - Mayolande S.A., Seclin	France
	Sikkens S.p.A., Dormelletto	Italy	Papeteries de Buxeuil S.A., Buxeuil	France
	Colorificio Linvea S.p.A., Naples	Italy	A/S Blumøller, Odense	Denmark
49 -	Miluz S.A.I.C.I.F., Buenos Aires	Argentina	Tomten A/S, Sandvika	Norway
	Comp. de Tintas e Vernizes R. Montesano S.A., São Paulo	Brazil	Lilla Edets Pappersbruks AB, Lilla Edet	Sweden
55 -	Metropolitan Paint Factory Ltd, Bangkok	Thailand	with establishments in the Netherlands, West Germany, United Kingdom and Denmark	

**Akzo Pharma, Oss****Netherlands***ethical drugs*

(Organon International B.V., Oss),

*non-prescription drugs*

(Chefaro International B.V., Rotterdam),

*hospital supplies and equipment*

(Organon Teknika B.V., Oss),

*raw materials for the pharmaceutical industry*

(Diosynth B.V., Oss),

*veterinary products*

(Intervet International B.V., Boxmeer),

*crop protection products*

(AAgrunol B.V., Groningen)

Sales offices or production plants of one or more of the above companies are established in:

- the Netherlands, West Germany, Belgium, France, Italy, United Kingdom, Republic of Ireland, Denmark, Norway, Sweden, Finland, Switzerland, Spain, Portugal, Greece, Turkey
- Mexico, Argentina, Brazil, Colombia, Ecuador, Venezuela
- Lebanon, Iran<sup>c</sup>, India<sup>c</sup>, Thailand, Indonesia, Philippines, Hong Kong, Japan<sup>c</sup>
- Australia, New Zealand
- Morocco, Zaire, South Africa<sup>c</sup>

**Akzo Consumenten Produkten, The Hague****Netherlands***detergents and cleaning products, paper products, health and body-care products, foodstuffs*

Kortman &amp; Schulte B.V., Dordrecht

**Netherlands**65 - Akzona Inc., Asheville, North Carolina **U.S.A.***chemical fibers, salt, specialty chemicals, pharmaceuticals, wire and cable products, leather, foodstuffs and various industrial products*

American Enka Co., Enka, North Carolina

**U.S.A.**

Armak Co., Chicago, Illinois

**U.S.A.**

with establishment in Canada

Armira Corp., Sheboygan, Wisconsin

**U.S.A.**

Brand-Rex Co., Willimantic, Connecticut

**U.S.A.**with establishments in United Kingdom<sup>b</sup> and Canada

International Salt Co., Clarks Summit,

Pennsylvania

**U.S.A.**

with establishments in Canada and the Netherlands Antilles

Organon Inc., West Orange, New Jersey

**U.S.A.**

with establishment in Canada

**Other companies**

- |      |  |             |
|------|--|-------------|
| 50 - | Silenka B.V., Hoogezand (glass fibers)   | Netherlands |
| 19 - | N.V. Verenigde Instrumentenfabrieken Enraf-Nonius, Delft (medical equipment, etc.) | Netherlands |
|      | Akzo Engineering B.V., Arnhem  | Netherlands |
| 50 - | Moulinages Motte S.A., Mouscron (textured synthetic yarns)                         | Belgium     |
|      | Feldmühle A.G., Rorschach (adhesive tape)  | Switzerland |

<sup>b</sup> affiliate of British Enkalon Ltd (60%) and Brand-Rex Co. (40%); total participation of Akzo N.V.: 63%

<sup>c</sup> participation less than 95%

## Seven-year financial review

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consolidated balance sheet at year's end	1975	1974	1973*	1972*	1971	1970*	1969
in Hfl million							
property, plant and equipment	4,396	4,322	4,235	4,250	4,274	4,280	3,745
investments in non-consolidated companies	307	285	282	341	335	306	315
other non-current assets	125	175	155	130	140	143	124
non-current assets	4,828	4,782	4,672	4,721	4,749	4,729	4,184
inventories	2,113	2,562	1,641	1,615	1,664	1,581	1,458
short-term receivables	1,906	1,831	1,954	1,728	1,590	1,563	1,369
prepaid expenses	51	56	52	54	56	61	38
cash and marketable securities	539	524	840	645	616	493	656
current assets	4,609	4,973	4,487	4,042	3,926	3,698	3,521
total assets	9,437	9,755	9,159	8,763	8,675	8,427	7,705
capital stock	593	593	562	542	542	521	514
capital surplus, paid in	658	658	689	710	710	730	703
retained earnings	1,526	1,993	1,652	1,412	1,340	1,218	1,139
other reserves	207	230	384	401	400	649	625
stockholders' equity	2,984	3,474	3,287	3,065	2,992	3,118	2,981
minority interest in Group equity	541	565	573	570	610	536	503
Group equity	3,525	4,039	3,860	3,635	3,602	3,654	3,484
provisions	1,052	958	991	809	725	857	809
long-term debt	2,693	2,124	2,047	2,407	2,402	2,198	1,729
long-term liabilities	3,745	3,082	3,038	3,216	3,127	3,055	2,538
bank borrowings and overdrafts	308	410	162	223	273	270	237
other current liabilities	1,859	2,224	2,099	1,689	1,673	1,448	1,446
current liabilities	2,167	2,634	2,261	1,912	1,946	1,718	1,683
total Group equity and liabilities	9,437	9,755	9,159	8,763	8,675	8,427	7,705
invested capital**:							
of consolidated companies	6,963	6,836	6,616	6,510	6,394	6,403	5,707
in non-consolidated companies	307	285	282	341	335	306	315
total	7,270	7,121	6,898	6,851	6,729	6,709	6,022
property, plant and equipment							
capital expenditures	745	799	549	555	943	1,035	742
depreciation	519	531	540	527	526	472	397

### development of stockholders' equity, 1969-1975 (in Hfl million)

stockholders' equity at January 1, 1969	2,519
issuance of stock, including capital surplus	405
stock dividends	208
retained earnings	616
goodwill resulting from acquisitions of companies	(411)
change in exchange rates	(292)
other changes	(61)
stockholders' equity at December 31, 1975	2,984

\* based on a cash dividend

\*\* Group equity plus long-term liabilities

consolidated statement of income	1975	1974	1973	1972	1971	1970	1969
in Hfl million							
sales	9,717	10,761	9,418	8,235	8,056	7,249	6,366
salaries, wages and social charges	3,109	3,144	2,764	2,478	2,354	2,073	1,670
depreciation	519	531	540	527	526	472	397
other costs	6,106	6,314	5,350	4,645	4,535	4,064	3,498
operating income (loss)	17	772	764	585	641	640	801
interest	234	147	147	172	165	112	61
taxes on operating income and interest	58	226	283	181	238	259	375
equity in earnings of non-consolidated companies	13	42	42	29	23	31	28
Group income (loss) before extraordinary items	180	441	376	261	261	300	393
extraordinary items	253	8	3	7	4	19	5
Group income (loss)	433	449	373	268	265	319	388
of which minority interest	7	69	82	51	56	58	64
net income (loss)	440	380	291	217	209	261	324
profit available for allocation	-	210	241	188	184	241	308
distributed income	-	118	107*	97*	98	104*	102
common stock, in thousands of shares of Hfl 20 par value							
value	29,594	29,594	28,062	26,989	26,989	25,958	25,590
number of employees	98,200	105,400	105,800	101,000	104,500	100,800	100,300
per share of common stock, in Hfl							
net income (loss) before extraordinary items	6.53	12.55	10.48	7.70	7.62	9.22	12.80
net income (loss) after extraordinary items	14.86	12.83	10.37	8.02	7.72	10.01	12.65
profit available for allocation	-	7.08	8.59	6.94	6.81	9.24	12.02
dividend	-	4.00	3.80	3.60	3.60	4.00	4.00
of which							
- in cash		4.00	1.20	1.20	3.60	1.20	4.00
- in cash or, at stockholder's option, in common stock			2.60	2.40		2.80	
number of shares entitling holder to one new share			18	25		25	
stockholders' equity	100.80	117.36	117.08	113.49	110.78	120.06	116.40
ratios							
operating income (loss) as percentage of sales	0.2	7.2	8.1	7.1	8.0	8.8	12.6
personnel costs as percentage of sales	32.0	29.2	29.3	30.1	29.2	28.6	26.2
net income (loss) as percentage of stockholders' equity	14.7	10.9	8.9	7.1	7.0	8.4	10.9
distributed income as percentage of net income	-	31.2	36.6	44.9	46.8	40.1	31.5
distributed income as percentage of profit available for allocation	-	56.4	44.2	51.8	53.0	43.4	33.2
sales : invested capital	1.40	1.57	1.42	1.26	1.26	1.13	1.12
Group equity : liabilities	0.60	0.71	0.73	0.71	0.71	0.77	0.83
Group equity : non-current assets	0.73	0.84	0.83	0.77	0.76	0.77	0.83
current assets : current liabilities	2.13	1.89	1.98	2.11	2.02	2.15	2.09

\* of which Hfl 35 million (1973), Hfl 33 million (1972) and Hfl 32 million (1970) in cash

main product group statistics*	1975	1974	1973	1972	1971	1970	1969
<i>in Hfl million</i>							
<i>chemical fibers</i>							
sales to third parties							
textile uses	2,880	3,386	3,497	3,060	3,069	2,851	2,746
industrial uses	827	1,142	901	738	771	710	580
total	<u>3,707</u>	<u>4,528</u>	<u>4,398</u>	<u>3,798</u>	<u>3,840</u>	<u>3,561</u>	<u>3,326</u>
operating income (loss)	(326)	223	390	231	371	325	549
as percentage of sales	(8.8)	4.9	8.9	6.1	9.7	9.1	16.5
<i>chemical products</i>							
sales to third parties							
salt and heavy chemicals	1,428	1,653	1,204	1,147	1,030	973	627
specialty chemicals	824	991	753	645	622	403	315
coatings	836	772	638	575	535	524	340
total	<u>3,088</u>	<u>3,416</u>	<u>2,595</u>	<u>2,367</u>	<u>2,187</u>	<u>1,900</u>	<u>1,282</u>
operating income	80	317	168	172	136	201	152
as percentage of sales	2.6	9.3	6.5	7.3	6.2	10.6	11.9
<i>pharmaceuticals, consumer products and miscellaneous products</i>							
sales to third parties							
pharmaceuticals	971	819	706	624	579	471	374
consumer products	779	679	539	490	502	596	747
miscellaneous products	1,172	1,319	1,180	956	948	721	637
total	<u>2,922</u>	<u>2,817</u>	<u>2,425</u>	<u>2,070</u>	<u>2,029</u>	<u>1,788</u>	<u>1,758</u>
operating income	229	232	206	182	134	114	100
as percentage of sales	7.8	8.2	8.5	8.8	6.6	6.4	5.7

geographical statistics*	1975	1974	1973	1975	1974	1973	
<i>in Hfl million</i>							
<i>EEC countries</i>			<i>rest of Europe</i>				
sales by area of destination				sales by area of destination	1,432	1,531	1,302
the Netherlands	1,218	1,302	1,126	sales by area of origin	685	691	617
West Germany	1,939	2,115	1,925	invested capital	500	475	438
other EEC countries	<u>2,020</u>	<u>2,229</u>	<u>1,904</u>	number of employees	7,800	8,100	8,200
total	<u>5,177</u>	<u>5,646</u>	<u>4,955</u>	<i>North America</i>			
sales by area of origin				sales by area of destination	2,018	2,318	2,182
the Netherlands	3,237	3,554	2,903	sales by area of origin	1,909	2,163	2,008
West Germany	2,547	2,819	2,520	invested capital	1,543	1,392	1,326
other EEC countries	<u>994</u>	<u>1,124</u>	<u>1,093</u>	number of employees	16,100	17,100	20,100
total	<u>6,778</u>	<u>7,497</u>	<u>6,516</u>	<i>rest of the world</i>			
invested capital				sales by area of destination	1,090	1,266	979
the Netherlands	2,417	2,268	2,235	sales by area of origin	345	410	277
West Germany	1,761	1,856	1,811	invested capital	239	250	213
other EEC countries	<u>503</u>	<u>595</u>	<u>593</u>	number of employees	5,200	6,100	4,900
total	<u>4,681</u>	<u>4,719</u>	<u>4,639</u>				
number of employees							
the Netherlands	29,700	30,600	29,700				
West Germany	26,000	28,800	28,500				
other EEC countries	<u>13,400</u>	<u>14,700</u>	<u>14,400</u>				
total	<u>69,100</u>	<u>74,100</u>	<u>72,600</u>				

\* consolidated companies



