

**Akzo**

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# Akzo n.v., Arnhem

General Meeting of Shareholders  
to be held at the Hilton Hotel,  
Apollolaan, Amsterdam,  
on Wednesday, May 10, 1972,  
at 10.30 a.m.

## *agenda*

- 1 Opening
- 2 Report of the Board of Management for the fiscal year 1971
- 3 Approval of the balance sheet and the statement of income;  
submission of the dividend proposal
- 4 Amendment of the articles of association
- 5 Determination of the number of members of the Supervisory Council and of the number of members of the Board of Management
- 6 Appointment of members of the Supervisory Council
- 7 Appointment of the certified public accountant
- 8 Any other business

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## Supervisory Council

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

## Board of Management

G. Kraijenhoff, president  
L. H. Meerburg, senior deputy president  
S. C. Bakkenist, deputy president  
L. Vaubel, deputy president  
A. van Driel  
P. J. van Helden, Jr  
J. H. E. Hessels  
D. W. van Krevelen  
H. J. Kruisinga  
F. Prakke  
H. J. Schlange-Schöningen  
A. Stikker

## Secretary

A. H. M. Wentholt

Following a traffic accident, Mr. M. van den Brandeler, secretary of the supervisory council and of the board of management, died on September 24, 1971. In his position he gave the company the benefit of his able mind and warm heart for many years.

Mr. J. Meynen and Mr. J. van Tilburg, having reached retirement age, withdrew from the supervisory council at the annual meeting of stockholders held May 12, 1971. Mr. van Tilburg served a valued function on the council, particularly in the area of labor relations. Mr. Meynen was on the AKU board of management since 1948. He was its president from 1962 to 1966. Under his management considerable progress was made with diversification and internationalization. Following his retirement as president of AKU, Mr. Meynen had accepted the deputy chairmanship of the supervisory council. To fill the vacancies, the annual meeting appointed Messrs. K. Soesbeek, outgoing president of the board of management, and W. F. G. L. Starrenburg, previously a member of the advisory council. At the meeting the decision was announced to dissolve the advisory council, which had completed its consultative task after the merger. Appreciation was expressed to its members for the services performed.

The annual meeting of stockholders accepted the resignation from the board of management of Mr. K. Soesbeek, the president, who had reached retirement age. Mr. Soesbeek thus concluded an impressive career extending over more than 40 years. Akzo is deeply indebted to him for his substantial achievement in behalf of the company. We are rejoiced that through his appointment to the supervisory council we shall continue to have the benefit of his wide knowledge and experience. The meeting also accepted the resignation of Mr. K. van Waveren, who, to our regret, had to relinquish his seat in 1970 for reasons of health. The supervisory council provided for Mr. Soesbeek's successors by appointing Mr. G. Kraijenhoff and Mr. L. H. Meerburg to be president and senior deputy president, respectively. Mr. H. J. Schlange-Schöningen, previously a member of the Enka Glanzstoff board, was appointed to the board.

Messrs. P. J. van Helden, Jr, J. H. E. Hessels and L. Vaubel, who have reached retirement age, will resign from the board at the annual meeting of stockholders convened for May 10, 1972.

# Financial highlights

	1971	1970
sales, in Hfl million	8,056	7,249
percentage increase over previous year	11.1%	13.9%
operating income, in Hfl million	641	640
as percentage of sales	8.0%	8.8%
Group income before extraordinary items and additional depreciation, in Hfl million	261	300
net income, in Hfl million	184	241
as percentage of stockholders' equity	6.2%	7.7%
per share of common stock, par value Hfl 20		
per share, in guilders	6.81	9.24
cash flow (Group income plus depreciation), in Hfl million	791	791
per share of common stock, par value Hfl 20		
per share, in guilders	24.94	26.22
distributed income, in Hfl million	98	104*
as percentage of net income	53.0%	43.4%
dividend per share of common stock, par value Hfl 20 per share, in guilders	3.60	4.00**
stockholders' equity, in Hfl million	2,992	3,118
per share of common stock, par value Hfl 20		
per share, in guilders	110.78	120.06
common stock, in Hfl million	539.8	519.2
common stock, in thousands of shares of Hfl 20 par value	26,989	25,958
property, plant and equipment, in Hfl million		
capital expenditures	885	1,001
depreciation, including additional depreciation	555	495
number of employees at year's end	104,500	100,800

\* of which Hfl 32 million in cash

\*\* of which Hfl 2.80 in cash or, at stockholder's option, in common stock at the rate of one new share of Hfl 20 par value for every 25 shares of common stock held



# Report of the board of management

## General review

Sales amounted to Hfl 8,056 million, compared with Hfl 7,249 million in 1970. The 11% rise in sales fell short of expectations. Persistent pressure on prices and the changes in the rates of exchange adversely affected sales of our Western European companies by approximately Hfl 200 million.

Net income decreased by 23% to Hfl 184 million, or, in terms of income per share, from Hfl 9.24 to Hfl 6.81. The decrease was mainly due to the fact that the rise in sales was not attended with a significant increase in operating income as a result of the adverse trend of costs and selling-prices and the developments in the monetary field, while interest expenses increased considerably. Moreover, the balance of extraordinary items was lower than in 1970. Cash flow (Group income plus depreciation) was on a level with 1970, amounting to Hfl 791 million.

In view of the decrease of income in 1971 and the uncertainty as regards business developments in 1972, it is proposed to pay a dividend of Hfl 3.60 per share of common stock, Hfl 20 par value (last year Hfl 4.00 per share), of which Hfl 1.20 was paid earlier as an interim dividend.

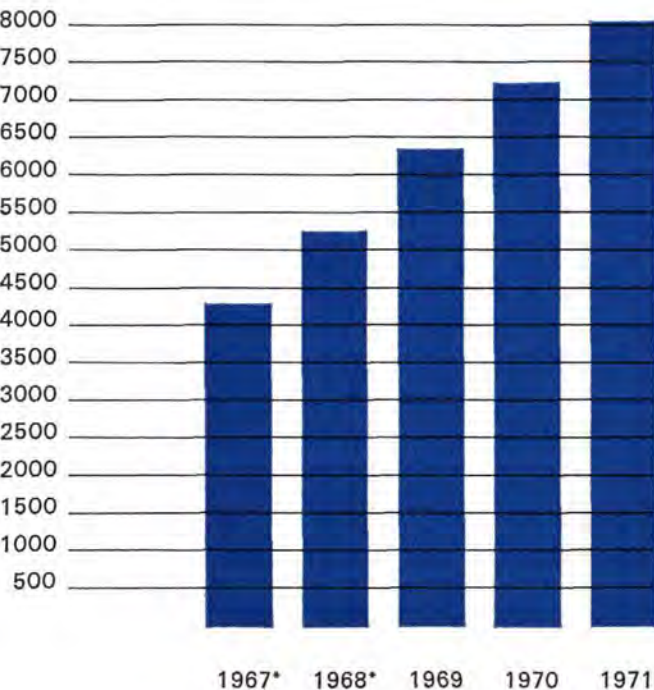
Income from chemical fibers, although up in comparison with 1970, was still far from satisfactory. Income improvement was accounted for chiefly by our operations outside Western Europe, notably those in the United States.

The year 1971 witnessed a substantial decrease of income for the Salt and heavy chemicals, and Chemical specialties product groups. This was caused by a moderation of the growth rate of shipments and decreases in selling-prices of some products, as well as by initial losses incurred during the start-up of our vinyl chloride plant.

Despite higher sales, income of the Coatings group was lower than in 1970. Developments were very satisfactory in the Pharmaceuticals group; income of the Consumer products group was below the 1970 level.

Last May, the international monetary crisis resulted in a *de facto* revaluation of the German mark and the Dutch guilder. In the latter half of 1971, this had a distinctly adverse effect on the export results from our operations in West Germany and the Netherlands. Moreover, our exports to the United States were

Sales, in Hfl million



	1967*	1969	1971
Breakdown of sales into product groups	%	%	%
chemical fibers	52	52	48
chemicals	20	20	26
plastics, film and miscellaneous products	10	10	13
pharmaceuticals	7	6	7
consumer products	11	12	6
Breakdown of sales into sales areas	%	%	%
Netherlands	20	16	12
West Germany	24	25	22
other EEC countries	12	14	13
other European countries	18	17	18
North and Latin America	21	22	29
rest of the world	5	6	6

\* based on combined figures of AKU and KZO



affected by the temporary U.S. import surcharge. A further consequence of these monetary developments and the measures taken by the United States government was increased pressure on the Western European market. In particular, Japanese industry intensified its activities in Western Europe.

We consider the provisional monetary agreement reached by the end of 1971 of great importance to world trade. However, the higher exchange rates for the German mark and the Dutch guilder in relation to other important currencies handicap the competitive power of our companies in West Germany and the Netherlands. In particular, our position *vis-à-vis* our competitors based in France and Italy has weakened.

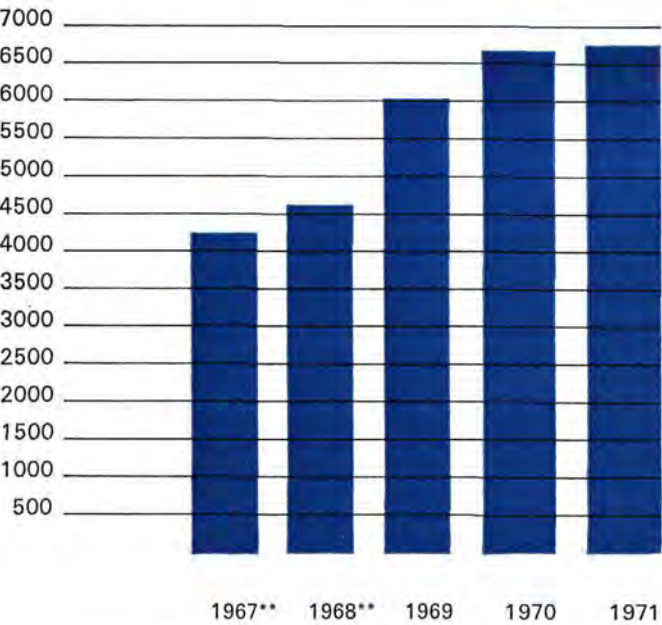
The adverse effect of these monetary developments on our 1971 net income was some Hfl 30 million. In addition, the changed rates of exchange caused a decrease of net assets, expressed in Dutch guilders, of virtually all our companies outside West Germany and the Netherlands. The resultant difference of Hfl 127 million was charged against Group net assets.

Despite improved efficiency, the progressive inflation of recent years has pushed the cost level of our Group upward to a considerable extent. In addition to being influenced by a rise in the wage level, this cost-push effect was intensified during the year under review by higher power costs and higher prices of some raw materials. The price trend for capital goods is also rising steeply. On the other hand, the selling-prices of a considerable part of our product range were marked by a downward trend. These factors resulted in a persistent squeeze on profit margins. Especially in West Germany and the Netherlands, where operations account for some two-thirds of the Group's productive capacity, inflation has assumed serious proportions. The substantial wage increases of the past few years far exceeded advances in labor productivity. During the year under review, we had to reduce the number of personnel in these two countries by 1,900 to 62,700 at end 1971.

The rise in labor costs and the often decreasing selling-prices of our products are reflected in the ratio of labor costs to sales. Whereas in 1968 labor costs amounted to 25.6% of sales, this percentage rose to 29.2 in the year under review.

For many years certain industries, such as chemicals and chemical fibers, were able to counterbalance the squeeze on profits that resulted from decreasing selling-prices and

Invested capital, in Hfl million\*



	1967**	1969	1971
Geographical distribution	%	%	%
Netherlands	49	40	37
West Germany	26	26	25
other EEC countries	2	4	5
other European countries	6	10	12
North and Latin America	17	20	21
rest of the world (less than 0.5%)	—	—	—

\* Group net assets + long-term liabilities  
\*\* based on combined figures of AKU and KZO

rising costs. Cost prices were reduced by improvements in process technology and by economies of scale. For various products, however, such economies are gradually coming to an end. Moreover, growth of consumption of the products of these industries is currently decreasing. This leaves insufficient possibilities to compensate the cost increases.

A further consequence of this development is that the degree of capacity utilization necessary just to cover costs has reached a very high level. For our chemical fiber plants in the EEC, the break-even point requires an average capacity utilization of around 90%. Some years ago it was about 75%.



The developments outlined above have reduced some of the Group's activities to a point where profitable operation is very difficult or downright impossible. A number of such activities were terminated in the year under review.

Unfortunately, round the turn of the year, the situation in the Western European chemical fiber industry deteriorated with unexpected rapidity. Certain sectors are now confronted with structural excess capacity. This calls for drastic measures. As, consequently, a number of assets will have to be written off prematurely, Hfl 150 million was charged against reserves at December 31, 1971.

In 1970, the less favorable prospects and our liquid position at that time necessitated a curtailment of capital expenditure programs. This policy was continued and intensified in 1971. Capital expenditures, however, were still considerable and the Group's continued growth forced us to negotiate new private borrowings. This increased interest expenses from Hfl 127 million in 1970, to Hfl 167 million in 1971.

Although measures directed toward reorganization and rationalization demand a considerable share of our attention, we are striving continuously to broaden and strengthen our product range as one way to improve profitability.

The further direction of the Group's geographical distribution will be governed increasingly by country-to-country differences in cost trends. After all, in the selection of a suitable location for new activities, cost considerations will more often than not play a decisive role. Additional factors which may be considered are the problems relating to pollution control and possibly divergent developments concerning the ways to finance the investments necessary to protect the environment.

In the past year Akzona Inc., in which we have a 57% interest, greatly expanded its scope of operations. Early in 1971, three companies were acquired from Armour and Company. Two of these companies, which by the end of 1971 were combined into one, Armak Co., are engaged in the manufacture of chemical and industrial specialties. The third is a major producer of high-style natural leathers for shoe uppers. Late in 1971, it was decided to construct a chemical manufacturing facility at Morris, Illinois, for the production of fatty amines. This will enable Akzona to consolidate its position as the world's leading producer in this sector.

In Latin America, we strengthened our position in the chemical fiber field through expansion of production



capacity, notably in Brazil. Moreover, jointly with Akzona, we acquired a large solar salt plant in this country early in 1971.

Akzo Pharma, Akzo Coatings and Akzo Consumer Products continued expansion by acquisition of, or participation in, a number of companies.

In many areas, the Group possesses considerable know-how with respect to products and production processes. The exploitation of this know-how is being increased in countries which are still in the early stages of industrialization. Where appropriate and if possible, attempts are made to cooperate with third parties.

The vast majority of our research and development activities is carried out under the responsibility of the divisions. Performed in close consultation with the commercial sections, these activities make an important contribution to the broadening and strengthening of the product range and afford a better insight into production processes.

To complement this divisional research, a central program of corporate research is conducted; this corporate research embodies important elements of cross-fertilization and is aimed specifically at the future needs of the Group as a whole.



During the year under review, Group expenditures on research were well over Hfl 250 million.

In consequence of the developments referred to above, 1972 will be a difficult year, notably so for our chemical fiber companies in Western Europe. However, our reorganization and rationalization measures will place us in a better position to cope with the fierce competition. This competition has become keener, particularly by the changed currency parities, the government support given to national industries in some countries, and by excessively low-priced imports.

General prospects in the United States are considered more favorable.

We are convinced that the vast resources of knowledge at our command, and the high degree of competence of the people in our organization the world over, together with the measures taken and to be taken, will ultimately lead to a resumption of the upward trend. To what extent this will already be evident in 1972 will depend strongly on the further development of selling-prices and costs.

#### Liquid position

The below table of source and application of funds shows that, in 1971, cash and marketable securities increased by Hfl 123 million.

in Hfl million

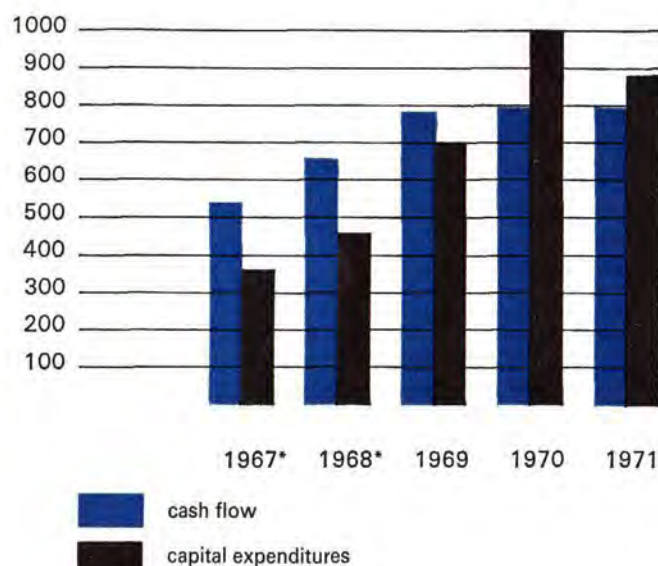
source of funds:	
cash flow	791
issuance of stock by Akzo n.v. and Group companies	29
borrowings (net)	391
	<u>1,211</u>
application of funds:	
investments in property, plant and equipment, and in affiliated companies	1,088
increase in inventories and trade receivables	84
dividends paid by Akzo n.v., and by Group companies to minority stockholders	61
	<u>1,233</u>
financed by increase in current liabilities, and other changes	145
	<u>1,088</u>
increase in cash and marketable securities	123
cash and marketable securities at December 31, 1970	493
cash and marketable securities at December 31, 1971	<u>616</u>

Expenditures for investments in property, plant and equipment, and in affiliated companies, as well as for the relatively small increase in inventories and trade receivables, were met for two-thirds from cash flow. The deficit was covered by funds taken down in respect of borrowings negotiated in the year under review and before. These funds amounted to Hfl 391 million after redemptions. With respect to the final dividend for 1970 of Hfl 2.80 per common share of Hfl 20 par value, an amount of Hfl 72 million was not distributed because nearly all stockholders preferred the stock dividend chargeable to capital surplus to the alternative of a cash dividend.

#### Investments, inventories and trade receivables

Capital expenditures for property, plant and equipment declined from Hfl 1,001 million in 1970, to Hfl 885 million. Expenditures in respect of investments in affiliates, i.e. acquisitions and investments in non-consolidated companies, amounted to Hfl 203 million in the past year. Of this amount, Hfl 133 million concerned the acquisition by Akzona Inc. of three Armour companies.

*Cash flow, and capital expenditures for property, plant and equipment, in Hfl million*



\* based on combined figures of AKU and KZO

The increase of inventories and trade receivables was modest compared with the rise in sales. Expressed as a percentage of sales, the total of inventories and trade receivables decreased from 43.5% in 1970, to 40.3% in 1971.

#### Financing

Out of Hfl 529 million aggregate principal amount of medium and long-term Group borrowings, Akzo n.v. and Dutch Group companies borrowed Hfl 198 million. Hfl 108 million of this amount was raised pursuant to a 9% loan negotiated in 1970 with Dutch institutional investors. This loan matures in 15 years and is for an aggregate of Hfl 300 million. A Hfl 29 million borrowing was arranged with the European Investment Bank for 15 years at 8½%; these funds will be used to partly finance an extension of the Delfzijl (Netherlands) manufacturing facility. Finally, a total of Hfl 61 million was raised by a number of private borrowings. Group companies abroad arranged borrowings in the aggregate amount of Hfl 331 million. The main transaction related to a credit facility for US \$ 75 million negotiated by Akzona Inc.; at December 31, 1971, US \$ 67 million had been taken down pursuant to this facility. Akzona Inc. and British Enkalon Ltd improved their

capitalization by complete conversion of their convertible debentures in the principal amounts of US \$ 44,577,000 and £ 2,000,000, respectively. As a result, Group long-term debt decreased by Hfl 77 million.

Redemptions on borrowings amounted to Hfl 138 million. In consequence of the above factors and certain additional changes, the aggregate amount of long-term debts increased on balance by Hfl 310 million.

The average interest rate on the debentures and the private borrowings was 6.7% at end 1971, as at end 1970. To improve its financial position further, British Enkalon Ltd issued 4,033,334 shares at a price of 75 pence per share (300%), equaling a cash amount of about £ 3.0 million. Existing shareholders were granted preemptive rights and Akzo n.v. fully exercised its rights.

#### Capitalization

The aggregate par value of Akzo's issued and outstanding common stock rose from Hfl 519.2 million to Hfl 539.8 million, as a result of the final 1970 dividend being paid in common stock.

The composition and financing of the Group's total assets developed as follows:

in Hfl million and in %	Dec. 31, 1971		Dec. 31, 1970		Dec. 31, 1969	
non-current assets	4,749	55	4,729	56	4,184	54
current assets	3,926	45	3,698	44	3,521	46
total	8,675	100	8,427	100	7,705	100
financed from:						
Group net assets	3,602	42	3,654	43	3,484	45
long-term liabilities	3,127	36	3,055	36	2,538	33
current liabilities	1,946	22	1,718	21	1,683	22
total	8,675	100	8,427	100	7,705	100
Group net assets						
liabilities	0.71		0.77		0.83	
Group net assets						
non-current assets	0.76		0.77		0.83	
current assets						
current liabilities	2.02		2.15		2.09	

A survey of the factors influencing the development of Group net assets in 1971 is given on page 30.



### Development in 1972

Akzona Inc. decided that, if conditions permitted, it would make a debenture issue in 1972. These debentures, in the aggregate principal amount of US \$ 60 million, have meanwhile been issued. They mature in 25 years and bear interest at the rate of 7½%. The proceeds will be employed to supplement financing arrangements for Akzona's expansion program in the next two years.

Group capital expenditures will continue to decline, except in the United States. Furthermore, the last installment, in the amount of Hfl 143 million, of the private borrowing negotiated in 1970 with Dutch institutional investors will become available. It therefore is not expected that Akzo n.v. will need to raise funds on the public capital market in 1972.

The number of employees increased from 100,800 at end 1970, to 104,500 at end 1971. As a result of continued expansion in certain sectors, including acquisitions, there was an increase in personnel of 6,900. On the other hand, there was a personnel reduction of 3,200 in other sectors. This reduction is largely attributable to natural turnover. In addition, because re-employment in other jobs was not always feasible, reorganization and curtailment of activities necessitated a number of lay-offs. A further reduction in the number of existing jobs during 1972 will have to be reckoned with. Prior to such reductions, the trade unions and the management-employee councils concerned will be consulted. We are pledged in this matter to giving the best possible personal guidance and help to those involved.

The turning of the economic tide does not change our views on good entrepreneurship in the social field. However, in our judgment the interests of our personnel are best served in the long term by the measures that are essential to preserve the health of our company. The acquisition of broad and, where possible, international experience in positions of responsibility by talented young men continues to be a key objective of our personnel policy. At this time the management development system created to achieve this end is being implemented in the entire Group. The opportunities available for greater national and international mobility are being utilized to an increasing extent.

Rapid social developments, which are a common feature today of most Western countries, are reflected in structural and procedural changes of enterprises. There is a clear movement towards a greater openness and a greater degree of co-determination by employees.

For some time now there have been experiments in certain of our Dutch plants with modern methods involving joint consultation on the approach to, and performance of, work at all levels in the organization. The first experiences from these experiments are encouraging for management and personnel.

Legislation enacted in the Netherlands during 1971 in the area of corporate law and management-employee councils marks a further step forward towards greater co-determination.

In compliance with the aims of this legislation we shall organize our Dutch-based interests – relating to 31,600 personnel and to an invested capital of about Hfl 2,500 million – in a company, Akzo Nederland b.v., specially to be formed for the purpose in 1972.

In this company, a central management-employee council will be created, which will have the powers defined by

# Environmental control

law, including co-determination in the appointment of members of the Akzo Nederland b.v. supervisory council.

In the past year, considerable demands were made once again on the flexibility of many of our employees. We greatly appreciate their evident willingness to cooperate.

### Number of employees

	Dec. 31, 1970	increase*	decrease	Dec. 31, 1971
Netherlands	31,600	600	600	31,600
West Germany	32,000	400	1,300	31,100
rest of Europe	20,300	1,700	1,000	21,000
United States	13,700	3,200	200	16,700
other countries	3,200	1,000	100	4,100
	100,800	6,900	3,200	104,500

\* due to expansion, including acquisitions

In the last few years, pollution of the environment has become a social problem of the first magnitude. The control of this pollution must be effectuated on the basis of recognition of a joint responsibility by government, industry and consumers for the factors upsetting the environmental balance.

In this context it is important that internationally accepted standards be drawn up and agreements be made concerning the financial basis on which the battle against pollution is to be waged. It would be unreasonable if all producers were not bound to the same extent by environmental regulations. Fiscal benefits, such as investment tax credits, that are granted in one country and withheld in another could be an additional source of inequity.

For our part, we shall do all we can to restrict to an acceptable level such undesirable environmental consequences as our activities may have. To this end we promote effective industrial housekeeping by management and personnel in all plants. In the year under review an inventory was prepared of current instances of environmental pollution. Action programs have been drawn up to reduce this pollution to the extent possible. Over the next three years, the adaptation of existing facilities alone is expected to demand additional investments of upwards of Hfl 150 million. Although certain benefits may accrue from these measures, their magnitude will be such that increases in costprices are inevitable.

In certain sectors we have been able to develop techniques that permit us to control pollution effectively. Thus the quantity of mercury getting into the effluent and the waste gases of the salt electrolysis plants will be substantially reduced. To cope with waste disposal problems, a processing facility will be constructed for chlorinated by-products, including those of the vinyl chloride plant. The hydrogen chloride released in processing the by-products is recycled to the vinyl chloride production plant. Capacity will be sufficiently large to enable by-products from non-Group companies to be handled as well. We are also devoting attention to the environmental consequences of the use of our products; studies focusing on this aspect have been started.







# Chemical fibers



World production of chemical fibers increased by 10%. In Western Europe and Japan this growth was 9% and 8%, respectively. On the other hand, the growth achieved in the United States was 13%. In synthetic yarns and fibers, the rise in world production was 18%. This expanded the share of these products in total world consumption of chemical fibers to 61% in 1971, compared with 57% in 1970.

In the heavily industrialized countries, the chemical fibers industry is now passing through a stage of transition. An era of turbulent expansion has come to an end and a period of more gradual development has begun. Particularly in the EEC area, the strong growth during 1968 and 1969 caused substantial capacity expansions due in part to the arrival on the scene of plants built by producers based outside this market. As a result of this and other factors, certain sectors of the chemical fibers industry in Western Europe have now entered a stage of structural excess capacity coupled with an unsatisfactory position in terms of profitability. In 1971, selling-prices were on average below the previous year's level. In the United States, where the price level for chemical fibers is on the whole less unfavorable, there was a tendency for prices to firm up, but not for all products, and particularly not for polyester yarns.

The geographical distribution of our chemical fiber interests, which covers countries with differing economic trends, stages of growth in consumption, and return and cost structures, contributed towards an improvement of overall results relative to 1970. Sales were up 8% to Hfl 3,800 million, with higher growth percentages for sales by our United Kingdom and United States companies. These companies could not fully meet the sharply increased demand for certain products. Supplementary shipments from other Group companies filled the gap. Also, the cooperation within the group was intensified to further a speedy introduction of specialties.

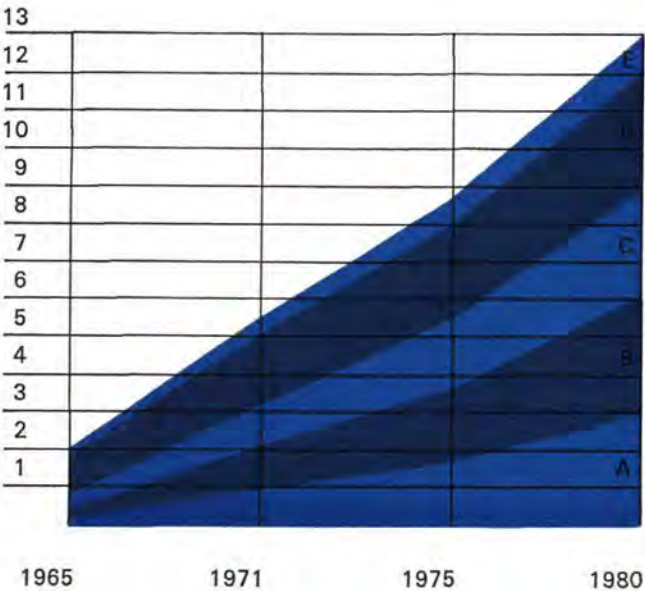
The increased share in our product mix of growth products, which generally make a greater contribution to income, had a favorable effect. By relatively simple means a partial switch from production of polyamide to polyester textile yarns was accomplished in a short time. This enabled us to strengthen further our favorable position for this product and to capture our share of the substantially increased world demand for these yarns. In our efforts to improve the composition of our product mix, major emphasis is also placed on the vigorous promotion of specialties. In addition, good results were achieved in the area of technology through streamlining of processes by combining production stages. We continue to have faith in the business potential of

World production of synthetic yarns and fibers, with forecast to 1980, in millions of metric tons

	1965	1971	1975	1980
A polyester filament yarn	0.14	0.92	1.65	3.03
B polyester staple fiber	0.32	1.14	1.97	3.03
C acrylic staple fiber	0.40	1.16	1.92	2.89
D polyamide filament yarn	0.91	1.81	2.50	3.03
E other synthetics	0.28	0.60	0.89	1.18
total	2.05	5.63	8.93	13.16

Average annual growth of synthetic yarn and fiber consumption

1965-1970:	19%
1970-1975:	13%
1975-1980:	8%







*Jacket from Diolen Markant® Jersey;  
lightweight, easy-to-wear, perfect fit.*

*Diolen BC®, a polyester textile yarn with built-in crimp properties developed by Enka Glanzstoff. During finishing, the crimp effect produces a bulky fabric eminently suited for use in lightweight, fashionable apparel.*

*Enka'Crepe®, a modified polyamide (nylon) yarn especially developed for lingerie and nightwear, has now also been introduced successfully into the U.K. market by British Enkalon.*



of the Western European chemical fibers industry about the turn of the year, together call for further drastic measures.

As a result of these measures and of the substantial growth in consumption of synthetic yarns and fibers that is anticipated, we expect to be able to bring about a gradual improvement in the results of our chemical fiber operations in Western Europe.

#### **Chemical fibers for apparel, home furnishings and household textiles**

After a period of decline, shipments of yarns and fibers for the apparel industry began to increase again. This was in line with the upswing in the textile cycle both in the United States and in Western Europe.

We achieved good results with flat and textured polyester yarns because of much increased demand for these products at predominantly stable prices. By year's end, however, prices began to fall substantially. This was due to the completion of capacity expansions and, in the case of Western Europe, to the measures in the monetary and trade areas. A noteworthy development, one on which we were able to capitalize, was the growing use of textured polyester yarns in knitted outerwear.

In spite of increased shipments, income from polyamide yarns and polyester fibers was disappointing, due especially to the continuing pressure of excess capacity. For our rayon yarns, shipments and results were on a satisfactory level.

Shipments of chemical fibers for the more stable home furnishings market were good. In the expanding carpeting market, we achieved substantially increased shipments, partly as a result of successful promotion of yarn types with improved properties. This materially strengthened our position for textured polyamide yarns. We were able to share fully in the rising consumption of polyamide fibers for carpets.

Our research effort is mainly oriented towards the improvement and tailoring of chemical fiber properties to the needs of processors and consumers. A second objective is the development of new types, such as heat-resistant textile yarns and fibers.

countries where the process of industrialization is in full swing and where the growth in consumption of synthetic yarns and fibers is fast.

Headway has been made with capacity expansions in Spain and in Latin America. In Brazil, our texturing plant will be extended considerably and construction of a polyester textile yarn production facility has commenced. Our experience to date with the sale of know-how and technical assistance has also been favorable. In a number of countries, negotiations concerning important new chemical fiber projects are in an advanced stage. Particularly in Western Europe, the situation for the Chemical fiber product group was nevertheless so unsatisfactory that the effort to reduce costs had to be stepped up. Before year's end this was beginning to show results.

However, the unfavorable effect of the changed currency parities and the above-mentioned decline in the position

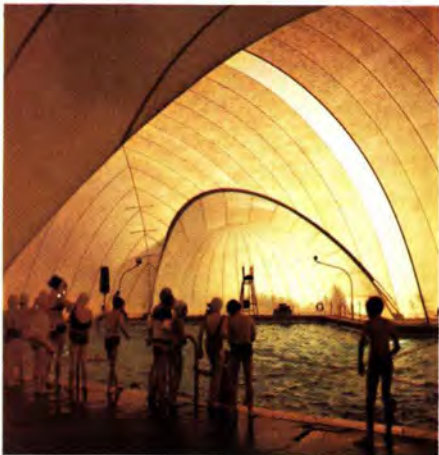




Due to their inherent properties, heavy-denier synthetic yarns are eminently suited for a variety of structural uses.

Rubber-coated polyester fabric conveyor belt.

Steel cord is increasingly used in automobile tire reinforcing fabrics.



Further research activities are concerned with:

antistatic polyamide yarns and fibers for apparel and carpets;

yarns with improved processing properties designed to meet the requirements of modern high-speed textile machinery;

new articles on the basis of existing yarns and of yarns with improved textile properties as respects appearance and handle;

*Diolen BC®* yarns for high-quality apparel fabrics;

an improved polyamide yarn for panty-hose;

new polyester and polyamide yarns with special crimp properties;

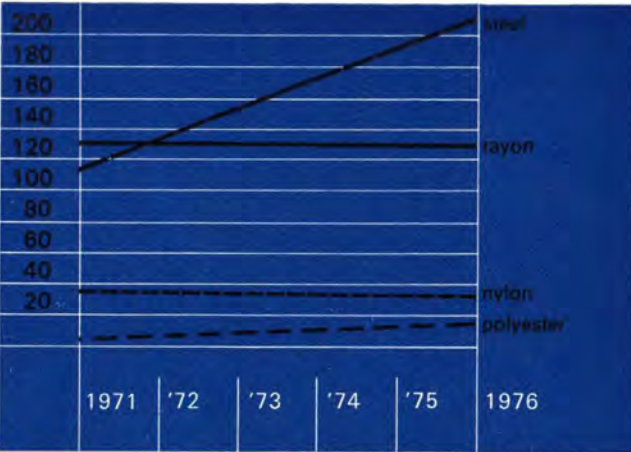
polyester yarns and fibers that will produce multi-color effects when dyed in the fabric.

**Chemical fibers for industrial uses**

The share of industrial yarns in total Group sales of chemical fibers is about 25%. Shipments in 1971 again exceeded the previous year's level. Among the factors which cushioned the effect of cost increases and lower

*Trends in usage pattern of tire reinforcing materials in Western Europe, in millions of kilograms*

	1971	1976
steel	116.0	210.0
rayon	132.5	129.0
nylon	36.0	33.5
polyester	4.0	16.0
total	288.5	388.5





prices for a number of products was the reasonably high degree of capacity utilization. As a result, income was not much below the 1970 level.

The tire industry experienced a leveling-off of business. This explains why from mid 1971 the demand for tire yarns was lower than expected. For the next few years, however, we still anticipate an annual rise in consumption of about 5% in the industrialized countries. On the other hand, we do expect shifts in the usage pattern for reinforcing materials. Thus the increasing use of radial tires should strongly boost the demand for steel cord, as indicated by our estimate of the consumption in Western Europe of the various reinforcing materials in the years ahead.

Despite variations between individual countries, the situation in Western Europe exhibits a distinct character of its own. It differs from the situation in the United States and Japan, where the radial tire has a lower penetration.

Supported by intensive research, our Group plays an active part in the evolution of tire reinforcing materials. A new pilot plant and laboratory facility for the further development of steel cord was put into operation. We expanded our production capacity for steel cord, *Ferenka*®, in West Germany. In the Republic of Ireland, we hope to start production in our new facility in the first half of 1972.

For the manufacture of automobile seat belts, which are being required by law in more and more countries, we have further developed the appropriate yarn types. In conveyor belting, hoses, ropes and nets, our products continue to be widely used.

Their inherent properties, such as tenacity, light weight, rotproofness and high chemical resistance make industrial yarns an excellent choice for the solution of a host of technical problems. Coated industrial fabrics are being increasingly used for silos, containers, air-supported structures, translucent roofings, etc. The uses of this material in civil engineering have our special attention. In particular, our research concentrates on those areas where the promise of engineering with fibers is especially obvious.

The effects of the decline of the business cycle were distinctly noticeable in this product group. The pressure on prices in some sectors and the steep rise of costs resulted in a squeeze on profit margins. Opportunities for price improvement were limited, mainly for reasons of competitiveness.

Although sales increased slightly, income was considerably lower than in 1970. This was notably due to the marked decrease in results of salt operations in the United States and to start-up losses of the vinyl chloride plant.

#### Salt

Production of salt remained at the 1970 level, viz about 10 million metric tons, or 7% of world production. Shipments, however, were somewhat lower than last year.

The mild winter weather in Western Europe (1970/1971 and 1971/1972) and the United States (1971/1972) had a distinctly adverse effect on shipments. The effect of these weather conditions was most pronounced in the United States, where a considerable part of Akzona's salt production is intended for snow and ice control purposes. An additional factor was the increasingly keen competition in the United States caused, in part, by salt imports which became possible in 1971 as a result of low ocean freight rates.

In Western Europe salt shipments were affected by the declining business trend in the pulp and paper industry, which is an important user of chlorine and sodium hydroxide, two products obtained from salt and used as process auxiliaries.

The capacity expansions of our salt plants in the Netherlands and Denmark were completed during the year under review. The modernization and expansion of one of Akzona's salt mines in the United States will be completed in the beginning of 1972. The solar salt facility on the Isle of Bonaire, Netherlands Antilles, will come on stream in the course of 1972. Jointly with Akzona, we acquired in 1971 a second solar salt plant, viz CIRNE, in Brazil. This plant, which has at present an annual capacity of 350,000 metric tons, supplies 15% of Brazil's requirements for industrial and consumption salt. The Group's annual salt production capacity in Western Europe and the Americas now totals 13 million metric tons and comprises vacuum, rock, and solar salt. During the year under review no further expansions were decided upon.



*The 300,000 metric tons per annum vinyl chloride plant near Rotterdam, which came on stream in 1971.*

*Now on stream: the new Dansk Salt (Denmark) salt plant.*

*Salt storage shed of the Norddeutsche Salinen GmbH salt production facilities at Stade (West Germany).*



#### **Chloralkali products**

The expansion of the chlorine production capacity at Delfzijl was completed. Annual capacity of our electrolysis facilities in the Netherlands and West Germany now totals 460,000 metric tons of chlorine. Production capacity of chlorine in Western Europe is exceeding demand. We expect this situation to continue in 1972.

For many years, there was an oversupply of sodium hydroxide, a product obtained in chlorine production. Meanwhile, this situation has been reversed, causing substantial rises in selling-prices. For 1972, expectations are that this trend will continue.

At Delfzijl, a facility for the production of dense soda ash was completed and has come on stream. Dense soda ash, which is used mainly in the glass-making industry, has physical properties which differ from those of light soda ash, a product also produced by the Group.



#### **Petrochemical products**

The start-up of the vinyl chloride plant near Rotterdam, which has a capacity of 300,000 metric tons per annum, was attended with difficulties, which were solved during the year under review.

The market for vinyl chloride, a raw material for plastics (polyvinyl chloride), came under pressure in the latter half of 1971. As a substantial part of our production has been committed on the basis of long-term contracts, a high degree of capacity utilization is expected for the next few years.

Shipments of chlorinated hydrocarbons, which are produced at Delfzijl, developed satisfactorily. Prices are under pressure due to excess capacities in Western Europe.

Despite increasing excess capacities in Western Europe, we succeeded in retaining our market share for bisphenol, a product used, among other things, as a raw material for epoxy resins.

The slight improvement in the prices of some petrochemicals referred to in our previous annual report has proved temporary. This was chiefly due to large-scale, low-priced supplies from the United States.

By the end of 1971, construction was started at Delfzijl of a plant for the production of methanol based on natural gas. This plant, which will have an annual capacity of 330,000 metric tons, will be operated by Methanol Chemie Nederland v.o.f., a 50/50 joint venture with DSM (Dutch State Mines). This joint venture also manages our existing activities in the manufacture and sale of methanol,

formaldehyde and formaldehyde-based synthetic resins. Production capacity of the latter two products, for which methanol is used as the raw material, will also be expanded. This will be realized by expansion of the existing facilities at Rotterdam and by construction of new facilities at Delfzijl.

#### **Other products**

For products such as oils, citric acid, fluorine compounds, and sulphuric acid, overall developments were not unsatisfactory. Shipments of edible and technical oils developed favorably. Production and shipments of sulphuric acid increased.

Agreement was reached on a combination of DSM's interests in the fertilizer sector with those of Verenigde Kunstmestfabrieken Mekog-Albatros n.v., a company in which we had a 40% participation. We now hold a 16% interest in the new company established for this purpose, Unie van Kunstmest Fabrieken b.v. (UKF) at Utrecht. This combination of interests is expected to offer improved opportunities to cope with the persisting difficulties in the fertilizer industry. This sector is characterized by worldwide excess production capacity, a situation which is expected to continue for some years to come.



# Chemical specialties

*Extrusion of desulphurization catalysts in our new Amsterdam plant, which has an annual capacity of 3,000 metric tons.*

*The increasingly stringent requirements with regard to air pollution are boosting demand for these catalysts, which are used to reduce the sulphur content of fuel oil.*

The principal users of our process auxiliaries and additives are the petroleum, petrochemical, chemical and plastics industries. The declining business trend in these sectors caused a decrease in shipments of several of our chemical specialties. Consequently, sales and income were lower than in 1970.

Our policy will be to concentrate on those product areas in which we hold an actually or potentially strong position. To achieve further international distribution, efforts will be made to cooperate with third parties. Activities which do not fit in with this policy, and activities which do not contribute or do not contribute sufficiently to income, will be terminated or transferred to third parties. This policy has already led to the sale of our manganese interests. The reorganization of our chemical division, in which all product-oriented activities were organized into a number of product groups, has placed us in a better position to realize the necessary economies.

## Process auxiliaries

The principal products in this category are initiators and catalysts.

In the field of initiators, products we supply mainly to the plastics industry under the *Noury*® trademark, sales of peroxides developed satisfactorily, both in Europe and in the United States. Various new types of the *Perkadox*® and *Trigonox*® ranges are encountering increasing market interest. We have decided to construct a complex in Belgium for the manufacture of these products. Safety of operation is given careful attention.

In view of the increasingly stringent requirements with regard to air pollution, demand for *Ketjenfine*® desulphurization catalysts is rising steeply. Such catalysts are used to reduce the sulphur content of fuel oil. Our research is directed mainly towards the development of improved and new types. A number of new desulphurization catalysts have been approved by some large oil companies. At Amsterdam, a new manufacturing plant for such catalysts came on stream; in Japan, a similar plant owned by Nippon Ketjen K.K. is under construction.

Despite increasingly keen competition in the field of cracking catalysts, we have succeeded in consolidating our position as suppliers of the petroleum industry. Sales of platinum reforming catalysts, which are used in the production of gasoline with a high octane rating, may increase considerably over the next few years depending on the requirements concerning the lead content of gasoline.

We are working with the European automobile industry on



the development of a catalytic afterburning system for exhaust gases.

## Other specialties

To date, the performance of the new manufacturing plant for white fillers (silicas) in Düren, West Germany, has fully measured up to our expectations. The field of chemicals for use as raw materials in detergent manufacture is characterized by fierce price competition. Our efforts are directed towards the development of new raw materials for this industry.

Agreement was reached with AVEBE, a leading Dutch producer of starch and starch derivatives, on the construction of a joint calcium gluconate plant, which will be completed in 1973. AVEBE will supply the principal raw material (dextrose). Outlets for calcium gluconate are





mainly in the pharmaceutical and food industries. Upon commissioning of this plant, we expect a further increase of our market share.

Activities in the aerosols sector, which comprise formulation of propellents and filling of spray cans, developed satisfactorily. However, owing to delayed commissioning of an expansion project, sales fell short of expectations. The range of products manufactured by Armac Co. is largely based on fatty acids and fatty acid derivatives, such as amines. These products find application in a wide variety of areas, such as cosmetics, toiletries, food, textile products, plastics and road building. Most product groups developed satisfactorily, notably the chemicals used as emulsifiers in asphalt road building (*Redicote®*).

Our Coatings product group (paints and synthetic resins) began the year in a new organization structure that had become necessary as a result of strong expansion through acquisitions. Activities have been assigned to a number of independent units on the basis of both geography and fields of product application. An efficient division of research has been accomplished among the centers in the Netherlands (Sikkens), West Germany (Lesonal) and France (Astral).

Far and away our most important market is the EEC, where we enjoy a strong position. Our continued objective is to grow faster than the overall coatings market in this territory, which averages a rate of 4 to 5% annually. For this we rely heavily on intensive research which should enable us to remain in the forefront of technical development and to extend our line of specialties.

We attach great importance to close contacts with our customers, to help them gain a deeper insight into the development of marketing and technology. For this purpose we have been organizing factfinding trips for a few years. In the past year a trip to Japan and the United States was organized for Dutch industrialists for the study of marketing techniques in these countries.

Our international position was reinforced when two paint production companies joined the Coatings product group. Early in the year an interest was acquired in Miluz S.A.I.C.I.F., a major Argentinian paint producer, which operates particularly in the area of industrial coatings. Our interest in the Italian market was enlarged by the purchase of a medium-size paint company, Colorificio Linvea S.p.A. of Naples.

During 1971, our sales again increased; income, however, remained below the previous year's level. In addition to the distinctly-felt effect of the business decline on our industrial coatings sector, cost inflation and the paucity of opportunities to adjust prices caused profit margins to dwindle. Sales of synthetic resins were on the increase and made a satisfactory contribution to overall income.

#### Industrial coatings

Well over a third of our total sales of coatings is accounted for by industrial coatings, with automotive paints constituting the principal category. General economic factors, and the strike in the German metal industry at year's end impaired the strong growth in this sector. Especially on account of keen price competition on the German market, income was lower than in 1970. Developments were satisfactory as regards the application





*Sikkens, Lesonal and Astral produce coatings for a variety of applications; Talens specializes in artists' and school paints.*

# Plastics, film and miscellaneous products

of several new techniques. In particular this is true of the electron beam curing process, in which specially formulated paints are dried within seconds from application of the coat. In the field of powder coating, we entered into cooperation with Robert Bosch GmbH (West Germany) through the formation of a joint venture, Resicoat GmbH. With the support of intensive research, we should be able to realize the promise that is unmistakably there. The market for coil coating, a process for the coating of steel strip, is growing. We were successful in further expanding our share of the market.

### Decorative paints; consumer products

This sector comprises products for painters, do-it-yourself products and car repair paints. Its development, stimulated by favorable weather conditions, was very satisfactory. Price competition for these products is generally keen. We expect that improved marketing methods will help achieve a higher growth rate for our Astral products in France.



### Plastics

Overall, this product group developed favorably in 1971. For *Akulon*® (nylon 6 and 6.6) and *Arnite*® (thermoplastic polyester) the past year was one of quality improvement and diversification of grades aimed at end-use areas with a high sales potential. This is exemplified by the development of such end-uses as gasoline tanks, carpet backings and wrapping films.

The new Akzo-developed polymer *Tenax*®, which will be used as synthetic paper in insulating high-voltage cables, has aroused widespread interest. End-uses in other electrical and electronic equipment are being investigated. Our research efforts are directed both towards the addition of new plastics to our product range and towards the production of specialties based on our existing materials.

### Film and adhesive tape

For many years Western Europe has been the scene of fierce competition in the field of film, both converted and non-converted. This competition has reduced prices to a level at which profitable operation is difficult or even impossible. Results of our film activities in this area were, consequently, unsatisfactory.

In the United States, Armak Co. substantially increased shipments of adhesive tape for special industrial uses and succeeded in augmenting its market share. The development of new types for the textile and other industries lends support to our expectation that this favorable trend will continue.

### Leather

Owing to rising labor costs and low-priced imports from Eastern European countries, the Western European shoe industry is increasingly switching over to the use of cheap, non-porous PVC-based raw materials. This has made market penetration of poromeric (porous) synthetic leather materials so difficult and costly that we have decided to concentrate on our Akzo-developed synthetic leather *Xylee*® and to terminate the production of *Alterna-Xylee*®, for which another process was used.

Shipments of *Xylee*®, which is used mainly for ladies' shoe uppers, increased in the year under review. We continue to direct our efforts towards the development of a high-quality synthetic leather for men's shoe uppers, which is of great importance for the future development of sales.

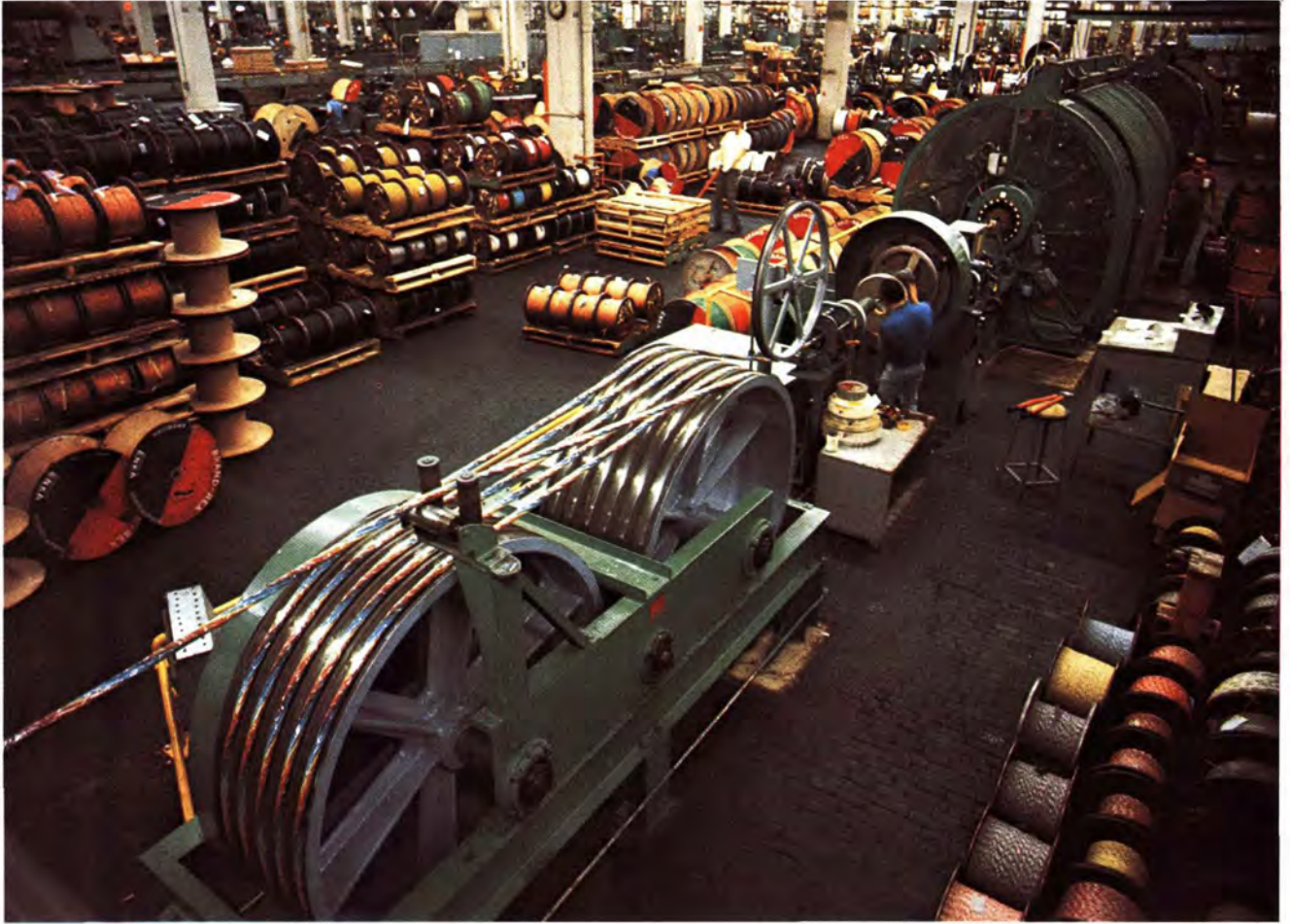
At Armour Leather Co., a leading supplier of natural leather to the U.S. shoe industry, business was satisfactory.





*Adhesive tape for a diversity of applications, one of many Armak Co. products.*

*Brand-Rex produces wire and cable both for the electrical industry (telephone cable) and for advanced applications in the electronics industry (computers, aerospace equipment).*



Both sales and income exceeded the 1970 levels. New leather types were introduced successfully; an investigation into the U.S. market potential for Xylee® has been undertaken.

#### **Wire and cable**

Results of Akzona's Brand-Rex division were substantially lower than in 1970. In the United States, 1971 was a year of declining business in the electrical and electronic industries. The usage of telephone cable also decreased.

This affected the price level of wire and cable products and caused shipments of some products to level off. Brand-Rex strengthened its position on the U.S. market by the acquisition of Abbott & Co., a producer specializing in the manufacture of wire assemblies for the electrical appliance industry.

Brand-Rex's advanced know-how in the wire and cable sector prompted the decision to establish a new company in the United Kingdom (Scotland). This company, the capital stock of which is owned jointly by British Enkalon Ltd (60%) and Akzona Inc. (40%), will initially direct its



efforts towards the sale of wire and cable to the Western European computer industry.

#### Miscellaneous products

Armak Co. considerably expanded its shipments of industrial abrasives and adhesives. An important outlet for adhesives is the packaging materials industry. New types of adhesives for non-woven textiles were introduced to the market.

Developments at n.v. Silenka of Hoogezand (the Netherlands), a producer of glass fibers, fell short of expectations. Glass fibers are used, among other things, for reinforcement of plastics. The steep rise in costs was not offset by the increase of sales. Prospects for 1972 are considered somewhat more favorable.

Sales by n.v. Chemische Industrie AKU-Goodrich (Ciago) of synthetic rubbers and latices reached a new high. Owing to rises in costs and the revaluation of the Dutch guilder, income of this largely export-oriented company was lower than in 1970. It was decided to construct a manufacturing plant for polyurethane polymers in Belgium; for this purpose Ciago België n.v. was established. The plant will come on stream in the latter half of 1972.

In 1971, sales increased nearly 25% compared with the previous year; about 11% is accounted for by the acquisition of a few companies. All product groups contributed to the growth of sales.

The development of income was also gratifying. The erosion of profit margins as a result of higher costs was successfully controlled through stricter efficiency measures. Continued diversification and the constantly growing number of operating companies at home and abroad necessitated a structural revision of the pharmaceutical division. In the new organization, the lines of demarcation between the various units operating internationally are much more definite, which should considerably facilitate the task of the units to build their own identity. Overall policies are coordinated by a central body, Akzo Pharma n.v.

#### Pharmaceuticals for human use

This field is primarily covered by the Organon group with establishments in some 30 countries. The principal area of activity is in ethical drugs, with hormone preparations assuming a prominent position.

In early 1971, our position in West Germany was strengthened by the acquisition of a participation in the chemical and pharmaceutical company Dr. Thiemann GmbH at Lünen.

Within the Organon group, further progress was made to diversify in the direction of proprietary drugs and specific hospital supplies.

The Chefaro sector concentrates entirely on the sale of proprietary drugs. It was expanded further by the transfer of similar products from other operating companies of the Organon group. At this time Chefaro operates facilities in the Netherlands, Belgium, West Germany, the United Kingdom, Spain and Finland. In this sector further internationalization has been set in motion.

A highly reliable 'do-it-yourself' pregnancy test was introduced in six European countries under the tradename *Predictor*<sup>®</sup>. It has done so well that it will be launched on the markets of several more countries.

Hopes are high for the development of our young line of hospital supplies. Prospects for a successful penetration in the international market are so good that selling activities were combined in a newly formed company, Organon Teknika n.v., incorporated in early 1972.

Our line of diagnostics and hospital specialties had already been extended in 1970 by the inclusion of infusion liquids and blood fractions through the acquisition of Poviet





Producten n.v. In 1971, a form of cooperative endeavor was agreed upon with n.v. Verenigde Instrumenten-fabrieken Enraf Nonius of Delft (the Netherlands). This company's specializations include the development and production of medical equipment. Akzo n.v. acquired a 20% participation in the capital stock of Enraf Nonius, which company has a 5% share in the capital stock of Organon Teknika.

In the same sector an agreement was concluded with n.v. De Vree of Merksem (Belgium). This agreement secures access to a product line and to know-how in the field of X-ray equipment, in which this company specializes.

An interesting example of fruitful cooperation between divisions with differently oriented activities is afforded by the development of an artificial kidney in which *Cuprophane*® film is used for the membrane. Work has now progressed to the point where introduction of this artificial kidney can be expected in the foreseeable future.

A speedy internationalization of activities in the area of hospital supplies is projected. Further possibilities of product differentiation are being studied.

In the hormone preparations sector, we consolidated our strong position in anabolics. Compared with last year, we were able to significantly expand sales of oral contraceptives. The same is true for diagnostics. The trend in sales of alkaloids was again satisfactory.

In the United States, although the cost of general and applications research and marketing rose rather sharply, Organon Inc. (an Akzona subsidiary) may look back upon a satisfactory year.

#### Veterinary products

In the area of veterinary products, our production and selling activities are organized in the Intervet group, a combination of all our veterinary interests.

Business in this sector was quite satisfactory. The scope of our activities was broadened by the acquisition of three veterinary companies, viz Laboratoires Ménard Frères S.A. and Laboratoire Vetavia S.à.r.l. in France, and Poultry Biologicals Ltd in the United Kingdom. The latter of these companies works successfully in the control of certain poultry diseases. The effect of these acquisitions is to add considerable strength to the group, and to create a fine basis for further growth.

#### Raw materials for the pharmaceutical industry

In addition to marketing raw materials for the pharmaceutical industry, the Diosynth group now also produces them. This change is the result of the transfer of the chemical manufacturing operations of Organon International to Diosynth International n.v. The latter company thus came into control of production facilities in the Netherlands, France, the United Kingdom, Mexico and India. In these countries, and in West Germany, Italy and Spain, the group has sales companies.

Sales of raw materials to non-captive users fell somewhat short of expectations. Price quotations for pharmaceutical raw materials are largely in US\$, so that the lower dollar exchange rate affected returns adversely.

#### Phytopharmaceutical products

Our activities in this product area (crop protection products) are combined in the AAgrunol group.

It is true that business was favorable in the year under review, but the group now faces the difficult task of compensating for the portion of sales and activities lost by n.v. Orgachemia as a result of the termination of its cooperation in the Netherlands with Geigy A.G., when the latter company merged with Ciba A.G. The resulting narrowed base necessitated integration of n.v. Orgachemia's remaining activities with those of n.v. AAgrunol at Groningen (the Netherlands). Where practicable and if possible, the capacities that thus became available at Orgachemia will be utilized by other sections of the division.





*Some products marketed by Chefaro:  
Chefarine '4'® , best selling painkiller in the  
Netherlands; Davitamon AD® , vitamin preparation  
for children; Sucrosa® and Sukretine®,  
sweetening agents for low-calory diets.*

*Predictor®, a pregnancy test commercialized  
with much success, is obtainable without a  
doctor's prescription.*

*Candling an egg to find the right spot for  
injection of a virus to obtain a vaccine against  
poultry diseases (inoculation).*

# Consumer products

Production and sale of our consumer products are mainly centered on Benelux, Scandinavia and France. During the year under review sales developed favorably. However, operating income was below the previous year's level. One of the factors affecting income was the restrictions imposed by governmental prices policies in some countries.

Further development of sales and income will mainly depend on the rate at which new, high-grade products are introduced. The increasingly selective buying habits of the public make ever heavier demands on our research and development efforts. Problems of environmental hygiene are also playing an increasingly prominent part in our research program.

## Detergents and cleaning products

In the Benelux countries and Scandinavia, where we produce and market detergents and cleaning products, results were favorable. In virtually all these countries, sales of *Biotex*® were up compared with last year. New detergents and cleaning agents were introduced to some existing markets.

## Body care products

Both in the Netherlands and abroad, results in this sector were again satisfactory. Sales of *Boldoot*® eau de cologne remained at the previous level. Sales of *Zwitsal*® baby care products increased over last year, despite the decreasing birth rate. We added a number of products to our range of *Endocil*® skin care preparations. Several new products are at the clinical research stage.

## Disposable paper

In the Netherlands and Denmark results of *Edet*® were favorable. In West Germany, where we continued our introduction program, growth of sales measured up to expectations.

Our strong position in the Swedish market resulted in a further increase of sales. However, operating income was lower than expected on account of a stringent price freeze during the greater part of the year. Expectations are that 1972 will witness a relaxation of the price controls in this country. This factor, and the introduction in 1971 of products with a higher luxury appeal, lead us to expect better results.



*Zwitsal® baby care products have made themselves a reputation; in the Netherlands, their market share is over 50%.*

*Duyvis, a producer of foods, continually expands its activities on the snacks market. Its kroepoek line (shrimp chips) is one of the most recent successes.*

*In 1971, two new detergents were introduced: Duo-wit® for white laundry and Duo-bont® for colored laundry.*



**Food**

In the Netherlands, a number of new *Duyvis®* products were introduced enabling us to further strengthen our position, notably in the snacks market. Despite keen competition, results were satisfactory in the soup sector, which is covered by our *California®* line. In France, where Mayolande S.A. markets sauces under the *Bénédictin®* and *Bénédicta®* trademarks, as well

as nuts under the *Bénénuts®* trademark, income was again substantially higher. Meanwhile, Mayolande S.A. and Ets. Eeckman S.A. were integrated. Our 50% share in Mayolande S.A. now relates to the combined companies. Ets. Eeckman is chiefly engaged in the production of refined oils, vinegar and mustard for the French and Belgian markets.

Arnhem, April 1972                      the board of management



# Report of the supervisory council

## Financial statements

*see pages 26 through 36*

We have the honor to submit to you herewith, pursuant to article 38 of the articles of association, our report on the balance sheet and statement of income, with notes, including consolidated statements, prepared by the board of management for the fiscal year 1971.

We approve the financial statements drawn up by the board of management, as well as the proposal made therein with regard to the allocation of profit. This proposal comprises the reservation of Hfl 86,680,352 and the allocation of Hfl 97,748,648 for distribution, including a dividend payment of Hfl 3.60 on each share of common stock, par value Hfl 20 per share. Of this amount, Hfl 1.20 was paid earlier as an interim dividend.

We propose that you approve the balance sheet and the statement of income, with notes, and discharge the responsibility of the board of management with thanks for their conduct of the business.

Arnhem, April 1972

the supervisory council:

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

# Consolidated balance sheet

26

after allocation of profit

in Hfl 1,000	December 31, 1971	December 31, 1970*
non-current assets		
property, plant and equipment	4,273,545	4,280,682
intangible assets	—	—
investments in non-consolidated companies	334,962	305,691
other non-current assets	<u>140,103</u>	<u>143,070</u>
	4,748,610	4,729,443
current assets		
inventories	1,664,553	1,580,544
short-term receivables	1,590,200	1,563,211
prepaid expenses	55,989	61,005
cash and marketable securities	<u>615,506</u>	<u>492,960</u>
	3,926,248	3,697,720
total assets	8,674,858	8,427,163
Group net assets		
capital stock	541,601	520,990
capital surplus, paid in	709,643	729,855
retained earnings	1,279,144	1,181,615
other reserves	<u>461,253</u>	<u>685,996</u>
stockholders' equity	2,991,641	3,118,456
minority interest in Group net assets	<u>610,218</u>	<u>535,584</u>
	3,601,859	3,654,040
long-term liabilities		
provisions	725,197	857,294
long-term debts	<u>2,401,943</u>	<u>2,197,856</u>
	3,127,140	3,055,150
current liabilities		
bank overdrafts	272,668	269,762
other current liabilities	<u>1,673,191</u>	<u>1,448,211</u>
	1,945,859	1,717,973
total Group net assets and liabilities	8,674,858	8,427,163

\* based on a cash dividend of Hfl 4 per share of common stock, par value Hfl 20 per share



# Consolidated statement of income

in Hfl 1,000	1971	1970
sales	8,056,258	7,248,824
operating costs		
salaries, wages and social charges	2,354,348	2,072,756
depreciation	526,448	471,639
other costs	<u>4,534,084</u>	<u>4,064,362</u>
	7,414,880	6,608,757
operating income	641,378	640,067
interest	<u>164,688</u>	<u>111,976</u>
	476,690	528,091
provision for taxes on income and capital	<u>238,438</u>	<u>258,948</u>
	238,252	269,143
equity in earnings of non-consolidated companies	<u>22,922</u>	<u>31,148</u>
Group income before extraordinary items and additional depreciation	261,174	300,291
extraordinary items	3,610	19,083
additional depreciation	<u>28,755</u>	<u>23,632</u>
	25,145	4,549
Group income	236,029	295,742
of which minority interest	51,600	55,203
net income	184,429	240,539

## 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 interests in Group net assets and in Group income are shown separately. The principal affiliated companies are listed on pages 42 through 44. 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 (the Netherlands).

## Currency

In the consolidated balance sheet, amounts in foreign currencies have been converted into Dutch guilders at the parities provisionally agreed upon in December 1971, or at rates of exchange derived therefrom; in the consolidated statement of income, foreign currencies have been converted into guilders at rates of exchange fixed for each quarter as typical of the rates then applicable.

## 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. Accelerated depreciation has been applied where appropriate.

To cover future additional depreciation on facilities to be put out of operation\*, a provision was made of Hfl 300 million, which was deducted from the book value. In this connection, the provision for deferred taxes was reduced by Hfl 150 million. The difference of Hfl 150 million was charged, at December 31, 1971, against Group net assets, specifically against the item 'Other reserves'.

in Hfl 1,000

book value at December 31, 1970	4,280,682
changes due to acquisition and disposal of consolidated companies	95,978
capital expenditures	885,076
depreciation	(526,448)
foreign exchange differences	(128,811)
other changes	( 32,932)
book value at December 31, 1971	4,573,545
provision for facilities to be put out of operation	(300,000)
book value at December 31, 1971, after deduction of the above provision	4,273,545

The book value of Hfl 4,574 million comprises the following items:

in Hfl 1,000	cost of acquisition	book value at Dec. 31, 1971	book value at Dec. 31, 1970
land	222,903	222,903	208,030
buildings	1,845,842	1,207,985	1,079,031
plant equipment and machinery	6,434,287	2,997,421	2,835,945
means of transport	101,864	44,932	40,484
assets not used in the production process	201,993	100,304	117,192
	8,806,889	4,573,545	4,280,682
projects under construction, included in book value		458,195	543,183
purchase commitments (not included in consolidated balance sheet)		187,000	242,000*
insured value		11,100,000	10,100,000

\* adapted for comparative purposes

## Intangible assets

Intangible assets, such as exploitation rights, goodwill, tradenames, patents and licenses, know-how, preliminary costs, start-up costs and research expenses are stated at no value.

These costs have been charged to operating income, with the exception of paid goodwill, which has been charged direct to Group net assets.

\* see page 6 of the report of the board of management



### Investments in non-consolidated companies

This item includes the non-consolidated companies and the loans to these companies. Investments in non-consolidated companies are stated at the amount of our share in stockholders' equity less provisions of Hfl 17 million. The calculation of stockholders' equity has been based as much as possible on the Akzo principles of valuation. The loans are stated at face amounts.

in Hfl 1,000

situation at December 31, 1970	279,079
changes in participation	26,876
equity in 1971 earnings	24,836
dividends received	(17,431)
foreign exchange differences	(25,798)
other changes in value	(17,018)
situation at December 31, 1971	270,544
loans at December 31, 1971	64,418
(at December 31, 1970: 26,612)	
	334,962

### Other non-current assets

The long-term receivables of Hfl 137 million included in this item are stated at face amounts. The part of long-term receivables becoming due within one year, amounting to Hfl 12 million, is included under short-term receivables.

The other assets included in this item are stated at cost or estimated value, whichever was lower.

### Inventories

Inventories are stated at cost or at 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, 1971	Dec. 31, 1970
raw materials and supplies	534,240	545,174
work in process	312,724	315,297
finished goods	817,589	720,073
	1,664,553	1,580,544

### Short-term receivables

Short-term receivables are stated at face amounts, less provisions for doubtful accounts and for exchange and transfer risks.

in Hfl 1,000	Dec. 31, 1971	Dec. 31, 1970
trade receivables	1,578,558	1,571,117
discounted drafts	(260,244)	(262,615)
	1,318,314	1,308,502
receivables from non-consolidated companies	38,072	33,192
other receivables	233,814	221,517
	1,590,200	1,563,211

### 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. Unlisted securities are stated at cost or estimated value, whichever was lower. Cash and other liquid assets are stated at face amounts.

in Hfl 1,000	Dec. 31, 1971	Dec. 31, 1970
securities	34,793	39,569
cash loans and time deposits	383,537	281,600
cash on hand and in banks	197,176	171,791
	615,506	492,960

### Group net assets

See survey overleaf.

### Provisions

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

in Hfl 1,000	Dec. 31, 1971	Dec. 31, 1970
deferred taxes	270,350	410,555
pension rights	180,292	172,573
other provisions	274,555	274,166
	725,197	857,294

### Provisions for deferred taxes

This item comprises the deferred taxes, less the part expected to become due in 1972. With few exceptions, the amounts of these taxes have not been discounted to present value. The decrease in 1971 chiefly concerns the deduction of Hfl 150 million from these provisions, as stated in the notes to the item 'Property, plant and equipment'.



### Survey of Group net assets

in Hfl 1,000	capital stock	capital surplus, paid in	retained earnings	other reserves	stock- holders' equity	minority interest	Group net assets
situation at December 31, 1970	520,990	729,855	1,181,615	685,996	3,118,456	535,584	3,654,040
payment of final 1970 dividend in stock	20,527	(20,527)	71,843		71,843		71,843
newly issued common stock	84	315			399		399
issuance of stock by Group companies to third parties, including conversion of debentures						109,909	109,909
goodwill resulting from acquisitions of companies*			(60,994)		(60,994)	(1,296)	(62,290)
retained 1971 earnings			86,680		86,680	22,451	109,131
additional depreciation**				24,542	24,542	4,213	28,755
changes in exchange rates				(74,160)	(74,160)	(52,665)	(126,825)
provision for facilities to be put out of operation (net after taxes)***				(150,000)	(150,000)		(150,000)
other changes*				(25,125)	(25,125)	(7,978)	(33,103)
situation at December 31, 1971	541,601	709,643	1,279,144	461,253	2,991,641	610,218	3,601,859

\* including adjustments concerning previous years

\*\* for American purposes, the additional depreciation should be included in 'Retained 1971 earnings'

\*\*\* see notes under 'Property, plant and equipment'

At least Hfl 260 million of the capital surplus, paid in, can be considered free from income tax within the meaning of the Dutch 1964 Income Tax Law ('Wet op de Inkomstenbelasting 1964').

### 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. To meet the ensuing liabilities, independent funds have been established or provisions have been made by Group companies in their balance sheets to an aggregate amount of Hfl 180 million. Improvements in pension rights are generally covered by raising the contributions for periods not exceeding the remaining time of service of the employees concerned.

### Other provisions

These provisions relate to various operating risks.

### Long-term debts

Long-term debts are stated at face amounts.

in Hfl 1,000	Dec. 31, 1971	Dec. 31, 1970*
convertible debentures	252,000	329,176
other debentures	209,012	216,953
private borrowings	1,928,124	1,567,240
other long-term debts	270,969	237,069
	<u>2,660,105</u>	<u>2,350,438</u>
part becoming due within one year (included under current liabilities)	258,162	152,582
	<u>2,401,943</u>	<u>2,197,856</u>

\* rearranged for comparative purposes

Private borrowings and other long-term debts have been secured to an aggregate amount of Hfl 560 million by means of mortgages, etc. The average interest rate of the debentures and private borrowings is 6.7%.

*Convertible debentures* in Hfl 1,000

In 1969, Akzo n.v. issued US \$ 70 million principal amount of 4½% debentures convertible into common stock. These debentures mature not later than 1989. Because virtually the entire final 1970 dividend was paid in common stock, at September 1, 1971 the conversion price was lowered from Hfl 140 to Hfl 135.80 per share of Hfl 20 par value, based on an exchange rate of US \$ 1 = Hfl 3.60. The valuation of this borrowing in guilders is also based on this 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 from January 1, 1972.

This borrowing includes the debentures held available for exchange of the remaining 4½% convertible debentures of US \$ 20 million principal amount, issued by Koninklijke Zout-Organon n.v.; at December 31, 1971, 168 debentures of US \$ 1,000 each had not yet been exchanged.

252,000

*Other debentures*

Currently outstanding principal amount of the 4½% debentures issued in 1962 by Akzo n.v. These debentures are redeemable in 13 equal annual installments, the first of which became due on July 1, 1968. Accelerated redemption is permitted.

12,336

Sfr 50 million principal amount of 5½% debentures issued in 1967 by Akzo n.v. These debentures are redeemable in 5 equal annual installments, the first of which will become due on July 31, 1978. Accelerated redemption is permitted from August 1, 1974.

42,175

Sfr 60 million principal amount of 6½% debentures issued in 1970 by Akzo n.v. These debentures are redeemable in 6 equal annual installments, the first of which will become due on September 15, 1980.

Accelerated redemption is permitted from September 15, 1974.

50,610

to be carried forward

105,121

carried forward

105,121

Currently outstanding principal amount of the 6% debentures issued in 1965 by Akzo Zout Chemie n.v. These debentures are redeemable in 10 equal annual installments, the first of which became due on December 1, 1971. Accelerated redemption is permitted in the years 1976 through 1979.

45,000

Currently outstanding principal amount of the 4½% debentures issued in 1961 by Akzo Pharma n.v. These debentures are redeemable in 15 annual installments of Hfl 1 million each, in the years 1967 through 1981. Accelerated redemption is permitted from May 1, 1971.

10,000

Profit-sharing employee debentures

6,776

Other debentures issued by consolidated companies; the average interest rate is 8.5%. In 1972 Hfl 1.5 million will be redeemed and in the years 1973 through 1977, Hfl 14 million.

42,115

209,012

*Private borrowings*

Redemption will occur:

in 1972

217,859

during the years 1973 through 1977

1,100,499

during the years 1978 through 1982

526,225

after 1982

83,541

1,928,124

**Other current liabilities**

Other current liabilities are stated at face amounts.

in Hfl 1,000

Dec. 31, 1971 Dec. 31, 1970\*

suppliers	578,669	565,395
non-consolidated companies	14,256	15,591
taxes on income and capital	79,167	63,196
dividend relating to financial year	97,269	103,942
redemptions on borrowings	258,162	152,582
pension rights	19,718	8,387
other liabilities and		
accrued charges	625,950	539,118
	1,673,191	1,448,211

\* rearranged for comparative purposes



### 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 86 million, of which Hfl 49 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 approx. Hfl 10 million per year.

### Consolidated statement of income

#### Sales

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.

#### Interest

in Hfl 1,000	1971	1970*
interest paid	204,899	174,819
interest received	38,159	47,929
	166,740	126,890
income from securities, etc.	2,052	14,914
	164,688	111,976

\* rearranged for comparative purposes

### Taxes on income and capital and reserves

Deferred taxes have been taken into account in the computation.

in Hfl 1,000	1971	1970
included under this heading in the consolidated statement of income	238,438	258,948
included under equity in earnings of non-consolidated companies and extraordinary items	(21,903)	(18,308)
taxes charged to Group income	216,535	240,640

### 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 incidental gains and losses not relating to normal operations; the taxes concerned have been taken into account.

in Hfl 1,000	1971	1970
extraordinary gains	27,629	45,409
extraordinary losses	24,019	26,326
	3,610	19,083

Extraordinary gains for 1971 mainly consist of gains relating to previous financial years, extraordinary tax benefits and incidental gains resulting from sale of fixed assets.

Extraordinary losses for 1971 mainly relate to reorganizations of operations and provisions for similar future measures.

### Additional depreciation

The depreciation included in operating income has been calculated on a historical cost basis. In view of the increase in prices, an amount of Hfl 28.8 million has been charged to income and has been included under Group net assets.

# Consolidated statement of source and application of funds

in Hfl million	1971		1970
cash and marketable securities at January 1	493		656
<b>source of funds</b>			
cash flow	791		791
issuance of stock by Akzo n.v. and Group companies	29		—
aggregate borrowings	529		550
receipts from disposal of participations	—		121
	1,349		1,462
	1,842		2,118
<b>application of funds</b>			
expenditures for property, plant and equipment	885		1,001
new participations	173		53
investments in non-consolidated companies	30		46
increase in inventories	92		141
increase in trade receivables	(8)		221
redemptions on borrowings	138		131
dividends paid to:			
stockholders of Akzo n.v.	32		101
minority stockholders of Group companies	29		29
	1,371		1,723
financed by increase in current liabilities, and other changes	145		98
	1,226		1,625
cash and marketable securities at December 31	616		493



after allocation of profit

in Hfl 1,000	December 31, 1971	December 31, 1970*
affiliated companies		
consolidated companies	3,500,832	3,428,771
non-consolidated companies	73,707	83,525
receivables from affiliated companies	<u>930,764</u>	<u>947,339</u>
	4,505,303	4,459,635
other receivables and prepaid expenses		
other receivables	58,925	54,249
prepaid expenses	<u>10,623</u>	<u>12,160</u>
	69,548	66,409
cash and marketable securities		
marketable securities	1,366	1,385
short-term investments	303,975	250,342
cash on hand and in banks	<u>27,997</u>	<u>22,951</u>
	333,338	274,678
total assets	4,908,189	4,800,722
stockholders' equity		
common stock	539,771	519,160
cumulative preferred stock	1,782	1,782
priority stock	<u>48</u>	<u>48</u>
capital stock	541,601	520,990
capital surplus, paid in	709,643	729,855
retained earnings	1,279,144	1,181,615
other reserves	<u>461,253</u>	<u>685,996</u>
	2,991,641	3,118,456
borrowings		
convertible debentures	252,000	252,000
other debentures	103,751	104,626
private borrowings	<u>571,440</u>	<u>437,150</u>
	927,191	793,776
amounts due to affiliated companies	845,702	741,641
sundry debts		
dividend relating to financial year	97,269	103,942
redemptions on borrowings	19,120	14,120
other debts	<u>27,266</u>	<u>28,787</u>
	143,655	146,849
total stockholders' equity and debts	4,908,189	4,800,722

The notes to the balance sheet and the statement of income are given on page 36.

\* based on a cash dividend of Hfl 4 per share of common stock, par value Hfl 20 per share

\* rearranged for comparative purposes

# Akzo n.v. statement of income and allocation of profit

in Hfl

1971

net income	184,429,000
allocation of profit according to art. 42 of the articles of association:	
dividend on priority stock – Hfl 60 per share of Hfl 1,000 par value	2,880
dividend on cum. pref. stock – Hfl 60 per share of Hfl 1,000 par value	106,920
dividend on common stock – Hfl 1 per share of Hfl 20 par value	26,988,569
bonus to supervisory council	480,000
	<u>27,578,369</u>
remaining amount	156,850,631
of this amount, it is proposed to retain	<u>86,680,352</u>
and to allocate the balance of	70,170,279
for payment of Hfl 2.60 per share of common stock of Hfl 20 par value.	

Following the acceptance of this proposal, the holders of common stock will consequently receive a total dividend of Hfl 3.60 per share of Hfl 20 par value, of which Hfl 1.20 was paid earlier as an interim dividend. The final dividend of Hfl 2.40, less 25% withholding tax, will be made available on dividend coupon no. 6 from May 23, 1972.

Arnhem, April 1972

the board of management:

G. Kraijenhoff  
L. H. Meerburg  
S. C. Bakkenist  
L. Vaubel  
A. van Driel  
P. J. van Helden, Jr  
J. H. E. Hessels  
D. W. van Krevelen  
H. J. Kruisinga  
F. Prakke  
H. J. Schlange-Schöningen  
A. Stikker

the supervisory council:

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



# Notes to Akzo n.v. balance sheet and statement of income

## General

The investments in affiliated companies, as well as the other assets and liabilities, have been valued in accordance with the valuation principles mentioned in the notes to the consolidated financial statements. Thus stockholders' equity and net income are equal to stockholders' equity and net income as shown in the consolidated financial statements, which form part of the notes to the balance sheet and statement of income.

## Non-consolidated companies

in Hfl 1,000

situation at December 31, 1970	83,525
changes in participation	7,204
equity in 1971 earnings	10,467
dividends received	(7,248)
foreign exchange differences	(3,914)
other changes in value	(16,327)
situation at December 31, 1971	73,707

## 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, 1,782 shares of cumulative preferred stock and 26,988,569 shares of common stock.

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

This item comprises the debentures and private borrowings, less the portion to be redeemed within one year. These redemptions are stated under 'Sundry debts'.

## Remuneration supervisory council

For 1971, the members of the supervisory council were paid a total of Hfl 732,500 (1970: Hfl 735,833), of which Hfl 480,000 (1970: Hfl 470,000) was a bonus pursuant to art. 42 of the articles of association. At end 1971 and at end 1970, the council numbered 16 members; all members receive a remuneration.

## Auditors' Report

*We have examined the foregoing financial statements 1971 of Akzo n.v., Arnhem, which also include the consolidated financial statements.*  
*In our opinion, these statements present fairly the financial position of the company at December 31, 1971, and the results of operations for the year then ended.*  
*With regard to the financial data of certain Group companies included in the financial statements, we have based our opinion in part on reports issued by other auditors, established in the Netherlands and abroad.*

# Five-year financial review

in Hfl million, except where otherwise stated

consolidated balance sheet	1971	1970	1969	1968*	1967*
property, plant and equipment	4,274	4,280	3,745	2,822	2,895
investments in non-consolidated companies	335	306	315	322	300
other non-current assets	140	143	124	76	78
non-current assets	4,749	4,729	4,184	3,220	3,273
current assets	3,926	3,698	3,521	2,630	2,011
total	8,675	8,427	7,705	5,850	5,284
stockholders' equity	2,992	3,118	2,981	2,519	2,380
minority interest in Group net assets	610	536	503	499	444
Group net assets	3,602	3,654	3,484	3,018	2,824
long-term liabilities	3,127	3,055	2,538	1,637	1,413
current liabilities	1,946	1,718	1,683	1,195	1,047
total	8,675	8,427	7,705	5,850	5,284
sales	8,056	7,249	6,366	5,260	4,329
percentage increase	11.1%	13.9%	21.0%	21.5%	0.5%
operating income	641	640	801	692	388
as percentage of sales	8.0%	8.8%	12.6%	13.2%	9.0%
Group income before extraordinary items and additional depreciation	261	300	393	318	
net income	184	241	308	247	156
as percentage of stockholders' equity	6.2%	7.7%	10.3%	9.8%	
per share of common stock, par value Hfl 20 per share, in Hfl	6.81	9.24	12.02		
cash flow (Group income plus depreciation)	791	791	785	647	536
per share of common stock, par value Hfl 20 per share, in Hfl	24.94	26.22	26.36		
distributed income	98	104**	102	78	73
as percentage of net income	53.0%	43.4%	33.2%	31.6%	46.8%
dividend per share of common stock, par value Hfl 20 per share, in Hfl	3.60	4.00***	4.00		
common stock	539.8	519.2	511.8	449.8	
number of shares of Hfl 20 par value (thousands)	26,989	25,958	25,590	22,492	
stockholders' equity	2,992	3,118	2,981	2,519	2,380
per share of common stock, par value Hfl 20 per share, in Hfl	110.78	120.06	116.40	111.92	
property, plant and equipment					
capital expenditures	885	1,001	699	460	364
depreciation, including additional depreciation	555	495	417	343	351
number of employees at year's end	104,500	100,800	100,300	84,300	77,200

\* combined figures of AKU and KZO

\*\* of which Hfl 32 million in cash

\*\*\* of which Hfl 2.80 in cash or, at stockholder's option, in common stock at the rate of one new share of Hfl 20 par value for every 25 shares of common stock held



March, 1972

Akzo is an international Group of companies operating in the fields of chemical fibers, chemicals, pharmaceuticals and consumer products. The Group's organization is product-oriented, with divisions acting independently and internationally. Where required by geographical or other conditions, different activities in a geographical area may be combined in one Group company.

Within the board of management of Akzo n.v. the following gentlemen are specifically in charge of overall Group policy:

- G. Kraijenhoff, president
- L. H. Meerburg
- S. C. Bakkenist
- L. Vaubel
- H. J. Kruisinga
- H. J. Schlange-Schöningen
- A. Stikker

Messrs. Schlange-Schöningen, Stikker and Kraijenhoff also act as chairmen of the product groups chemical fibers, chemical products and pharmaceuticals/consumer products, respectively. The other seats in the management bodies of the product groups are held by representatives of the managements of the divisions and Group companies.

The managements of the Group companies and divisions in which Akzo n.v. holds an interest of 95% or more are composed as follows:

**Chemical fiber group**

*Board of Management Enka Glanzstoff*

- L. Vaubel, president of the board of management of Glanzstoff AG
- J. H. E. Hessels, president of the board of management of Enka n.v.
- F. C. A. A. van Berkel
- A. Ebert
- S. Lochner
- D. Wendelstadt
- H. F. Wesenhagen
- H. G. Zempelin
- B. Zevenbergen

In addition, Messrs. Lochner, Wendelstadt and Zevenbergen are in charge of the textile divisions Polyamide and Rayon Yarns, Polyester Yarns, Fibers and Carpet Yarns, respectively, while Mr. Wesenhagen is in charge of the Industrial Yarns division and non-fiber operations.

*Board of Management Enka International n.v.*

- F. Prakke, president
- H. Karus
- A. F. J. C. Zillikens

**Chemical group***Management Akzo Zout Chemie n.v.*

J. A. Wolhoff, president  
 M. Boogaardt  
 J. H. Dijkema  
 G. H. W. Meeder  
 R. M. Smulders

*Management Akzo Chemie n.v.*

A. G. van den Bos, president  
 D. B. Kagenaar  
 H. W. Muzerie  
 P. W. Pfeiffer  
 H. A. Praetorius  
 P. J. S. Th. Stehouwer  
 H. J. J. van der Werf

*Management Akzo Coatings n.v.*

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

**Pharmaceuticals and Consumer products***Management Akzo Pharma n.v.*

P. J. van Helden, Jr, president  
 G. Hes  
 R. A. P. van Iersel  
 J. Veldman

*Management Akzo Consumenten Produkten n.v.*

Fr. Schuddeboom, president  
 H. van Doodewaerd  
 F. Sanders

**Staff departments Akzo n.v.**

The board of management is assisted by a number of Akzo staff departments headed by the following gentlemen;

J. P. van den Bent,  
 Social Affairs and Public Relations

A. M. van Haastrecht,  
 Organization and Efficiency

R. M. Lievaart,  
 Fiscal Affairs

A. A. Loudon,  
 Financial Affairs

B. W. van Mourik Broekman,  
 Personnel Affairs

R. J. Ovezall,  
 Accounting and Management Information

J. D. Roos,  
 Legal and Insurance Affairs

C. P. Spoel,  
 Computer Affairs

A. H. M. Wentholt,  
 Economic Affairs and Strategic Planning

M. W. Arts,  
 Internal Auditing

**Akzo Research & Engineering n.v.**

Akzo Research & Engineering n.v. is the central body for coordination of the Group's research and engineering activities; it is, moreover, directly responsible for corporate research and controls the activities of Akzo Engineering n.v.

*Board of Management*

D. W. van Krevelen, president  
 H. Kramers  
 A. Ebert  
 F. C. A. A. van Berkel



Chemical fibers

Filament yarns (flat and textured), staple fibers and non-wovens mainly produced from chemical raw materials, such as polyamide (nylon 6 and 6.6), polyester, polyacrylonitrile, polyurethane (elastomer), cellulose (rayon/cupro). Also yarns and fibers from glass, and cord from steel wire.  
End-uses include:

apparel, carpets and other home furnishing and household textiles

reinforcement of automobile and airplane tires, and conveyor belts

coated fabric for various technical applications, safety belts, fishing nets and rope.

Salt and heavy chemicals

Bulk chemicals based on salt, petrochemical raw materials, natural gas, sulphur and vegetable raw materials, including:

vacuum, rock, and solar salt for industrial uses, consumption, as well as snow and ice control, chlorine, caustic soda, soda ash, sodium sulphate, hydrochloric acid, hydrogen, bleaching liquor

chlorinated hydrocarbons, chloroacetic acid derivatives, methylamines, vinyl chloride, dimethylterephthalate (DMT), butanol, acetic acid, vinyl acetate, phenol compounds (including bisphenol), methanol, formaldehyde, urea formaldehyde

edible and technical oils, citric acid, fluorine compounds, sulphuric acid and other sulphur compounds, fertilizers.

Chemical specialties

Chemical specialties for use as raw materials, auxiliaries or additives, including:

silicates, aerosol propellents, gluconates, fatty acids and fatty acid derivatives, such as esters, amines, amides

catalysts, initiators, ion exchangers

stabilizers for the thermoplastics processing industry, carbon black and other fillers for the rubber processing industry, surface-active materials for the detergent and cleaning agent industry, various chemicals for the paper, textile, food, coatings and other industries.

Coatings

Paints, powder coatings, adhesives and synthetic resins for:

industrial uses, *e.g.* for automobiles, airplanes, railroad cars and for products of the metal-working, wood-working, furniture, packaging and other industries

non-industrial uses, *e.g.* for car repair, building, road marking, shipbuilding and other anti-corrosive uses

the 'do-it-yourself' market.

**Plastics, film and miscellaneous products**

- granules of nylon, polyester and other plastics for use as raw materials in the plastics processing industry for mainly technical end-uses
- film produced from viscose, nylon, polyester, polyethylene and other materials mainly intended for the packaging industry; adhesive tape
- leather and synthetic leather
- wire and cable for electrical and electronic end-uses, including telephony and computers
- synthetic and other adhesives, industrial abrasives.

**Pharmaceuticals**

- ethical drugs, including hormone preparations (anabolics, contraceptives), alkaloids, as well as proprietary drugs, such as vitamins, painkillers, cough syrups and sweetening agents
- hospital supplies, including infusion liquids, sera, diagnostics and medical equipment
- veterinary products, including vaccines and hormone preparations
- raw materials for the pharmaceutical industry
- phytopharmaceutical products (crop protection products).

**Consumer products**

- detergents and cleaning products, including soaking and prewashing agents, dish detergents, soap, chlorine water, soda, as well as cleaning supplies, including sponges and shammies
- body care products, including eau de cologne, baby care products, skin care creams and lotions
- disposable paper for household and industrial uses, including toilet paper, tissue paper for kitchen use, towels and table napkins
- foodstuffs, including oils, fats, margarine, sauces, dry mixes, snacks, nuts, preserves, dried vegetables and potatoes, soups, salads, salad dressings, mayonnaises, vinegar, mustard, bouillon cubes, aromatics and products for institutional kitchens.



# Divisions and Group companies and their principal operating companies

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March, 1972

Percentages participation are only stated for companies in which Akzo n.v. holds a direct and/or indirect interest of less than 95%.

	Enka Glanzstoff, Arnhem/ Wuppertal	the Netherlands/ West Germany	Akzo Zout Chemie n.v., Hengelo (O)	the Netherlands
	chemical fibers, plastics, film and miscellaneous products		salt and heavy chemicals	
	Enka n.v., Arnhem	the Netherlands	n.v. Kon. Ned. Zoutindustrie, Hengelo (O)	the Netherlands
	Struyck n.v., Zutphen	the Netherlands	n.v. Kon. Ned. Soda-industrie, Delfzijl	the Netherlands
51	— Te Strake n.v., Deurne	the Netherlands	n.v. Zoutchemie Botlek, Spijkenisse	the Netherlands
	Glanzstoff AG, Wuppertal-Elberfeld	West Germany	n.v. Herbicide-Chemie Botlek, Spijkenisse	the Netherlands
	Kuag Textil AG, Wuppertal-Elberfeld	West Germany	Petrochemie Delfzijl n.v., Delfzijl	the Netherlands
	Barmag Barmer Masch. fabrik AG, Remscheid	West Germany	16 — Unie van Kunstmest Fabrieken b.v., Utrecht	the Netherlands
	Fabelta, div. of Akzo België n.v., Brussels	Belgium	50 — Methanol Chemie Ned. v.o.f., Delfzijl	the Netherlands
93	— Erste Oesterr. Glanzstoff-Fabr. AG, Vienna	Austria	50 <sup>c</sup> — Akzo Chemie Verkoopkantoor n.v., Amsterdam	the Netherlands
	Feldmühle A.G., Rorschach	Switzerland	Norddeutsche Salinen GmbH, Stade	West Germany
	Ferenka Ltd, Limerick	Republic of Ireland	50 — Elektro-Chemie Ibbenb. GmbH, Ibbenbüren	West Germany
	Enka International n.v., Arnhem	the Netherlands	50 — Dansk Salt I/S, PR Mariager	Denmark
	chiefly chemical fibers		46 <sup>b</sup> — Comp. Ind. do Rio Grande do Norte, Macao	Brazil
62	— British Enkalon Ltd, Leicester	U.K.	42 — Holland Electro Chemical Industries (Pty) Ltd, Johannesburg	South Africa
62	— Teesside Textiles Ltd, Thornaby/ Stockton-on-Tees	U.K.		
31	— Bukflex Enkalon Ltd, Oadby- Leicester	U.K.	<b>Akzo Chemie n.v., Amstelveen</b>	<b>the Netherlands</b>
37 <sup>a</sup>	— Brand-Rex Ltd, Glenrothes (plant under construction)	U.K.	chemical specialties and heavy chemicals	
58	— La Seda de Barcelona S.A., Barcelona	Spain	Kon. Zwavelzuurfabr. v/h Ketjen n.v., Amsterdam	the Netherlands
45	— Cyanenka S.A., Prat de Llobregat	Spain	Chemische Fabr. Gembo n.v., Winschoten	the Netherlands
40	— Petroquímica Sudamericana S.A., Buenos Aires	Argentina	K.I.M. Noury & Van der Lande n.v., Deventer	the Netherlands
51	— Polyquímica S.A. Indústria Têxtil, São Bernardo do Campo	Brazil	n.v. Chemische Industrie Budel, Budel	the Netherlands
48	— Enka de Colombia S.A., Medellín	Colombia	60 — Ketjen Carbon n.v., Rotterdam	the Netherlands
40	— Fibras Químicas S.A., Monterrey	Mexico	50 — Cyanamid-Ketjen Katalysator n.v., Amsterdam	the Netherlands
44	— Century Enka Ltd, Calcutta	India	22½ — n.v. Titaandioxydefabr. Tiofine, The Hague	the Netherlands
			50 <sup>c</sup> — Akzo Chemie Verkoopkantoor n.v., Amsterdam	the Netherlands

a total participation of Akzo n.v.: 60%

b total participation of Akzo n.v.: 72%

total participation of Akzo n.v.: 100%

	Hoesch Chemie GmbH, Düren	West Germany		<b>Akzo Pharma n.v., Oss</b>	<b>the Netherlands</b>
	Oelwerke Noury & van der Lande GmbH, Emmerich	West Germany		n.v. Organon, Oss	the Netherlands
	OXYDO Ges. für chem. Produkte mbH, Emmerich	West Germany		Chefaro Nederland n.v., Rotterdam	the Netherlands
	Glanzstoff Köln GmbH, Cologne	West Germany		Organon Teknika n.v., Oss	the Netherlands
65	– Carbosulf Chemische Werke GmbH, Cologne	West Germany		Poviet Producten n.v., Amsterdam	the Netherlands
65	– Rhodanid Chemie GmbH, Cologne	West Germany		Diosynth International n.v., Oss	the Netherlands
	Nourylande S.à.r.l., Venette	France		Intervet International n.v., Boxmeer	the Netherlands
	Akzo Chemie S.p.A., Milan (facilities in Milan and Mornago)	Italy		Lab. Nobilis n.v./n.v. Verapharm, Boxmeer	the Netherlands
	Novadel Ltd, London	U.K.		Ver. Pharmac. Fabr. n.v., Apeldoorn	the Netherlands
	Interstab Ltd, Liverpool	U.K.		Aerosol Mij Holland n.v., Apeldoorn	the Netherlands
	Noury Chemical Corp., Burt, New York	U.S.A.		n.v. AAgrunol, Groningen	the Netherlands
40	– Hexaqualmia S.A., Mexico-City	Mexico		Organon GmbH, Munich	West Germany
50	– Nippon Ketjen K.K., Tokyo	Japan	46	– Chemisch Pharm. Fabr. Dr. Hermann Thiemann GmbH, Lünen	West Germany
50	– Kayaku Noury K.K., Tokyo	Japan		Organon België n.v., Brussels	Belgium
				Organon S.A., Paris	France
				Stab. Chimico Farmaceutici	
				Dott. R. Ravasini & Cia S.p.A., Rome	Italy
				Organon Laboratories Ltd, Morden	U.K.
				Poultry Biologicals Ltd, Cambridge	U.K.
				Organon Española S.A., Barcelona	Spain
				Organon Argentina S.A., Buenos Aires	Argentina
				Lab. Organon do Brasil Ltda, São Paulo	Brazil
				Diosynth S.A. de C.V., Mexico-City	Mexico
			49	– Organon Mexicana S.A., Mexico-City	Mexico
			49	– Organon (India) Ltd, Calcutta	India
			51	– Iran Organon S.A., Teheran	Iran
			60	– Nippon Organon K.K., Tokyo	Japan
				<b>Akzo Consumenten Produkten n.v., The Hague</b>	<b>the Netherlands</b>
				Kortman & Schulte n.v., Dordrecht	the Netherlands
				Koninklijke Dobbelman n.v., Nijmegen	the Netherlands
				Loda n.v., Dordrecht	the Netherlands
				Intec n.v., The Hague	the Netherlands
				Kon. Eau de Col. fabr. J. C. Boldoot n.v., Amsterdam	the Netherlands
				Kon. Fabr. T. Duyvis Jz. n.v., Koog a/d Zaan	the Netherlands
				Rotterdamse Margarine Industrie	
				J. M. Zwerver n.v., Vlaardingen	the Netherlands
				n.v. Fino Fabrieken, Harderwijk	the Netherlands
				Wilco Conserven n.v., Assen	the Netherlands
			50	– Mayolande S.A., Seclin	France
				A/S Blumøller, Odense	Denmark
				Lilla Edets Pappersbruks AB, Lilla Edet	Sweden



**57 – Akzona Inc., Asheville, North Carolina U.S.A.**

chemical fibers, salt, chemical specialties, pharmaceuticals, wire and cable, leather, adhesives, adhesive tape, industrial abrasives and food products

- 57 – American Enka Co., Enka, North Carolina U.S.A.
- 57 – Brand-Rex Co., Willimantic, Connecticut U.S.A.
- 57 – Nonotuck Mfg. Co., South Hadley, Massachusetts U.S.A.
- 57 – Abbott & Co., Prospect, Ohio U.S.A.
- 57 – Internat. Salt Co., Clarks Summit, Pennsylvania U.S.A.
- 57 – Organon Inc., West Orange, New Jersey U.S.A.
- 57 – Armak Co., Chicago, Illinois U.S.A.
- 57 – Armour Leather Co., Sheboygan, Wisconsin U.S.A.
- 57 – Armour Ind. Chemicals Ltd, Saskatoon Canada
- 26<sup>b</sup> – Comp. Ind. do Rio Grande do Norte, Macao Brazil
- 57 – Antilles Intern. Salt Co. n.v., Bonaire Neth. Antilles
- 29 – Lion Armour Company Ltd, Tokyo Japan
- 57 – Italcold S.p.A., Milan Italy
- 57 – Armour Hess Chemicals Ltd, Harrogate U.K.
- 23<sup>a</sup> – Brand-Rex Ltd, Glenrothes (plant under construction) U.K.

**Other companies**

- 50 – n.v. Silenka, Hoogezand (glass fibers) the Netherlands
- 40 – n.v. Chemische Ind. AKU-Goodrich, Arnhem (synthetic rubbers and latices) the Netherlands
- 20 – n.v. Verenigde Instrumentenfabrieken Enraf Nonius, Delft (medical equipment, etc.) the Netherlands
- 50 – Moulinaes Motte S.A., Mouscron (chemical fibers) Belgium

a total participation of Akzo n.v.: 60%

b total participation of Akzo n.v.: 72%





