

# TOKUYAMA CORPORATION

A N N U A L  
R E P O R T  
1 9 9 7




**Non-Consolidated Financial Highlights**

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Net Sales	¥186,334	¥171,696	\$1,502,697
Operating Income	13,323	11,135	107,440
Net Income	3,708	3,002	29,903
Total Assets	260,535	243,813	2,101,085
		Yen	U.S. dollars
Per Share:			
Net Income	¥14.54	¥11.77	\$0.117
Cash Dividends	6.00	6.00	0.048

Note: U.S. dollar amounts are translated from Japanese yen, for convenience only, at the rate of ¥124=US\$1.

# Contents

<i>To Our Shareholders</i>	<b>2</b>
<i>Review of Operations</i>	<b>4</b>
<i>Research and Development Activities</i>	<b>8</b>
<i>Topics</i>	<b>9</b>
<i>Financial Review</i>	<b>10</b>
<i>Non-Consolidated Balance Sheets</i>	<b>12</b>
<i>Non-Consolidated Statements of Income</i>	<b>14</b>
<i>Non-Consolidated Statements of Shareholders' Equity</i>	<b>15</b>
<i>Non-Consolidated Statements of Cash Flows</i>	<b>16</b>
<i>Notes to Non-Consolidated Financial Statements</i>	<b>17</b>
<i>Report of Independent Certified Public Accountants on the Non-Consolidated Financial Statements</i>	<b>23</b>
<i>Consolidated Balance Sheets</i>	<b>24</b>
<i>Consolidated Statements of Income and Retained Earnings</i>	<b>26</b>
<i>Notes to Consolidated Financial Statements</i>	<b>27</b>
<i>Report of Independent Certified Public Accountants on the Consolidated Financial Statements</i>	<b>28</b>
<i>Consolidated Six-Year Summary</i>	<b>29</b>
<i>Subsidiaries and Affiliates</i>	<b>30</b>
<i>Directory</i>	<b>31</b>
<i>Corporate Data / Board of Directors and Responsibilities</i>	<b>32</b>
<i>Products at a Glance</i>	<b>33</b>

## Operating Environment

In fiscal 1996, the year ended March 31, 1997, visible signs of recovery emerged in the Japanese economy. Although previously high public-works spending tapered off, solid gains in private-sector capital investment and a robust housing boom fueled economic revitalization. Demand was solid in chemicals, cement, plastics and related industries, with production remaining strong throughout the year. The depreciation of the yen sparked sharp rises in the cost of fuels, however, putting downward pressure on margins and sustaining difficulties in the operating environment.

To prevail in this climate, Tokuyama invested heavily in strengthening existing basic materials businesses and expanding into new sectors. We also worked to lower



Kaoru Tsuji,  
Chairman (right) and  
Yuichi Miura, President

costs in purchasing, distribution and manufacturing operations. While pursuing aggressive sales in Japan, we continued to focus on developing overseas businesses.

## Results for the Year

Boosted by buoyant demand across the board, net sales in fiscal 1996 rose 8.5 percent to ¥186.3 billion (US\$1,503 million). Our efforts to rationalize distribution costs and contain general and administrative expenses bore fruit, amplifying the sales gains to lift net income 23.5 percent to ¥3.7 billion (US\$30 million). Cash dividends applicable to the year remained unchanged at ¥6.00 (US\$0.048) per share.

## Outlook

Manufacturing activity is expected to remain at high levels, with gradual increases in

capital investment also in the offing, sustaining a moderate economic recovery in Japan. Nevertheless, the downward slide in public-sector spending will continue. Housing investment and consumer spending, which experienced a burst of activity in the lead-up to the national consumption tax hike in April 1997, is likely to be quiescent. Uncertainties associated with these factors obscure the economic outlook. Furthermore, the yen's long-term depreciation will tend to inflate relative prices for imported raw materials, impacting the bottom line of those companies which are not large net exporters of finished products.

To prosper against this backdrop, we are renewing efforts to reduce costs and raise efficiency. We will strengthen Tokuyama's core businesses while accelerating the pace of expansion into

**Tokuyama is working to overcome the challenges we now face. Alone and through alliances, we are reinforcing our core businesses while building strengths in promising new fields at home and abroad. By continuing to provide safe, environmentally sound products that meet stringent customer demands, we are confident the company will prosper for many years to come.**

new sectors. Conjoined with further inroads in overseas markets, these moves will yield further improvement in results. At the same time, we will continue with initiatives throughout the company to ensure the safety and lower the environmental impact of our products. For example, efforts are ongoing to recycle as many waste materials as possible for reuse as raw materials or fuel in our production processes. We would like to thank our shareholders for their continuing support in all our endeavors.

August 1997

Yuichi Miura

*President*



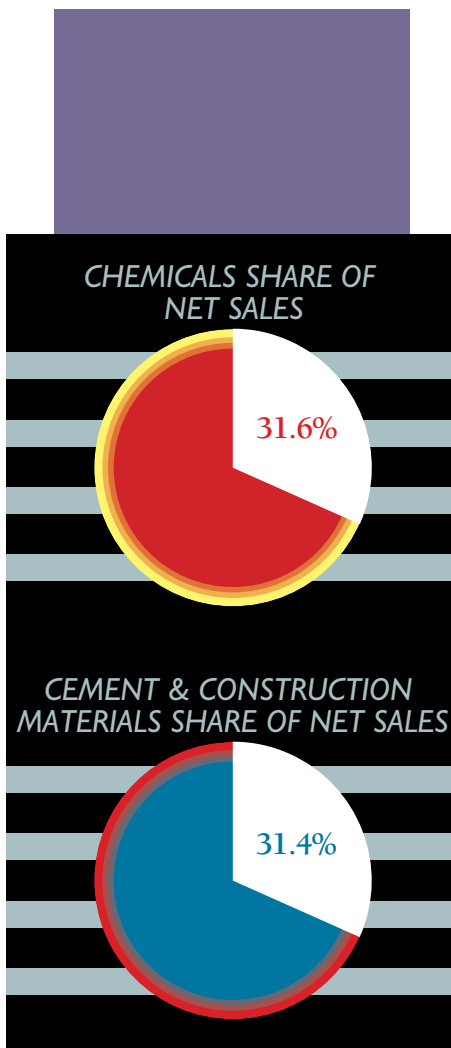
*Tokuyama's electrolytic caustic soda plant.*



*Fire-resistant plastic sashes went on sale in July 1996.*



*Reconstruction continues apace in earthquake-ravaged Kobe.*



## C h e m i c a l s

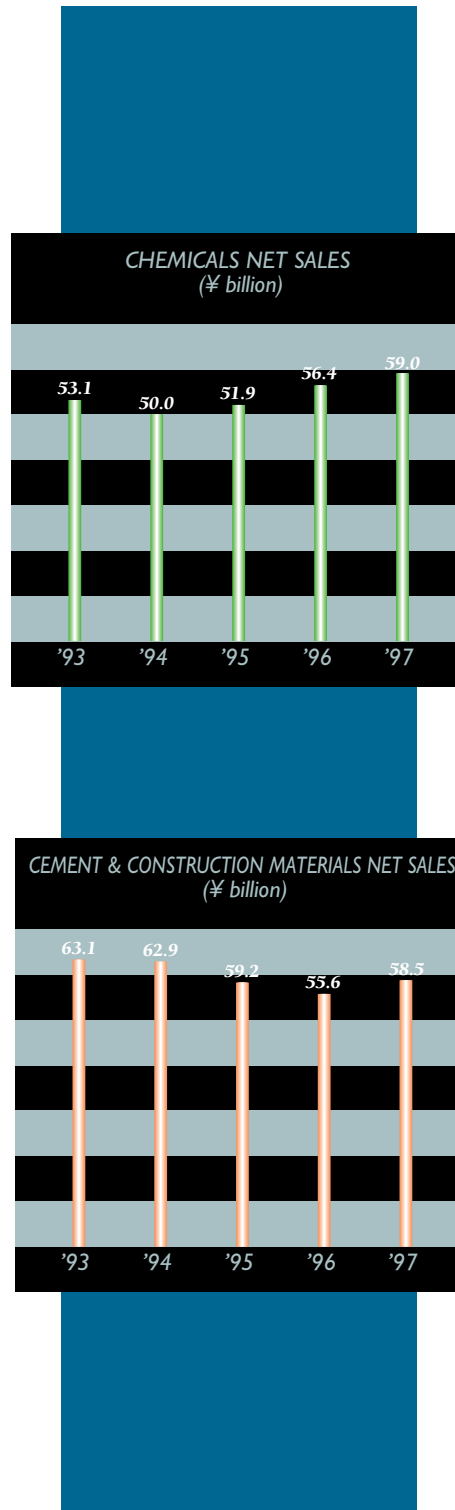
Chemical sales increased 4.4 percent to ¥59.0 billion (US\$475 million), generating 31.6 percent of total net sales in fiscal 1996. In inorganic chemicals, although sales volumes for caustic soda increased, an international supply glut depressed prices, causing total revenues to slip. Soda ash sales rose in terms of both volume and monetary amount. A slump in the domestic civil engineering sector led to lower sales of soda silicate cullet. Sales of chlorides were also mostly flat.

In organic chemicals, sales of chlorine-based solvents increased, with propylene oxide, ethylene dichloride and high-purity solvents for semiconductors also maintaining solid performances. The company took action to preserve its

position of competitive strength in Southeast Asia and ensure a stable supply of quality products to customers in the region, beginning construction in August 1996 of a new base in Singapore to produce high-purity solvents.

### Cement & Construction Materials

Representing 31.4 percent of total net sales, sales in the cement and construction materials sector rose 5.1 percent to ¥58.5 billion (US\$472 million). In cement, ongoing demand from reconstruction work in the earthquake-damaged Kobe area, aided by the lingering effects of large-scale public-works investment by the government, kept domestic demand buoyant during the first half of the year. Full-year sales in the domestic



market were up as a result. On the export front, rising demand in Japan caused limited capacity for producing cement for export. Prices recovered, however, which along with the yen's depreciation helped raise sales revenues over previous-year levels.

In the construction materials sector, the company's plastic sashes, which provide outstanding insulation for heating and cooling, recorded sizable sales increases, thanks to their superior energy-saving properties and the greater number of housing starts during the year. Sales in this sector declined as Tokuyama transferred operations for mortar and other construction materials to a subsidiary.

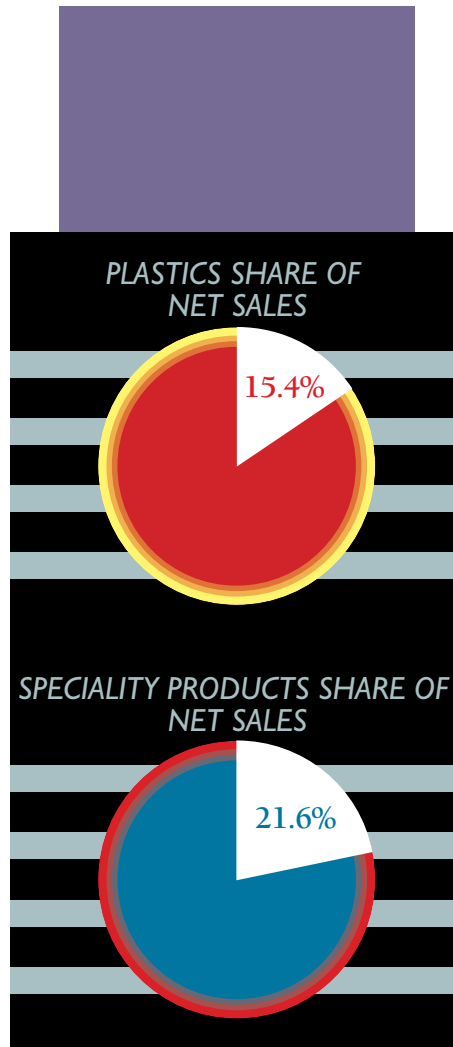
Made of polypropylene, this coffee maker offers durability and quality.



This new X-ray contrast agent is made from Tokuyama pharmaceutical bulks.



Fumed silica is used in molding compound filler materials for integrated circuits.



## P l a s t i c s

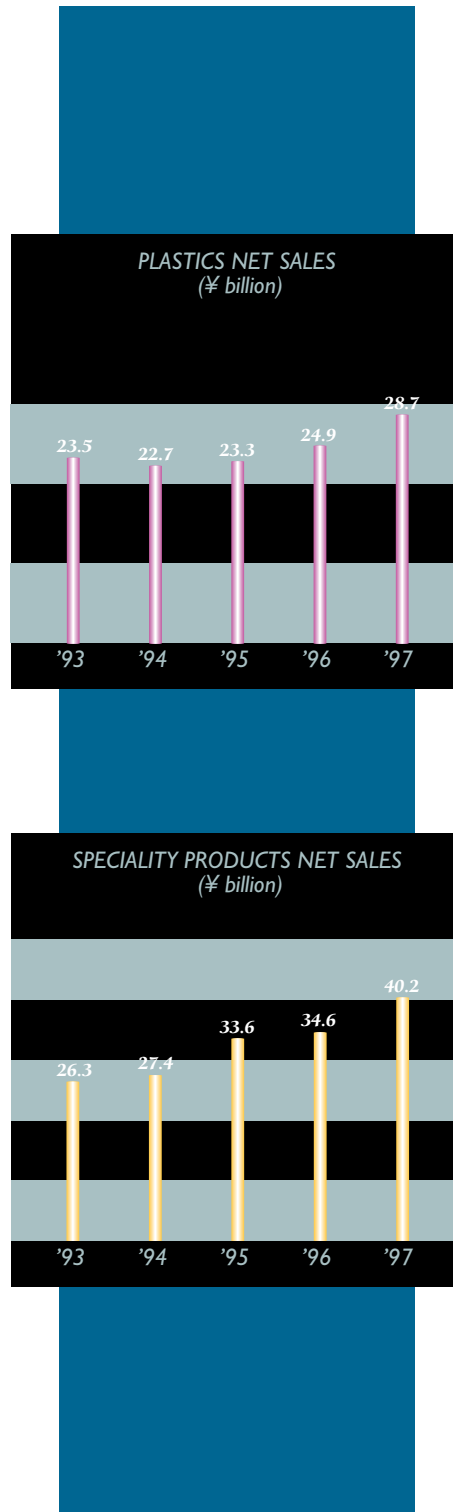
Divisional sales rose 15.0 percent to ¥28.7 billion (US\$232 million), accounting for 15.4 percent of total net sales. Demand for polypropylene for household items and packaging film applications was strong, fueling an increase in sales. The division worked to adjust price levels to reflect much of the higher cost of raw materials, somewhat alleviating pressure on margins. On the other hand, the weaker yen gave impetus to exports, sales of which rose significantly.

Sales volume climbed for various grades of polypropylene films, particularly in the field of films for food wrapping applications. The company took steps to expand its biaxial-oriented polypropylene (OPP) film business both in Japan and overseas. Subsidiary Tokuyama Film Co., Ltd. initiated OPP film production at a new facility

in Ibaraki Prefecture northeast of Tokyo; construction of the plant, which began in December 1995, was completed in May 1997. In Tianjin, China, ground was broken on the site of a new OPP plant in September 1996 for Tianjin Sunshine Plastics Co., Ltd., Tokuyama's joint venture with local partners.

### Specialty Products

Sales of specialty products climbed 16.1 percent to ¥40.2 billion (US\$324 million), contributing 21.6 percent of total net sales. Sales of polycrystalline silicon, the core product in the electronics materials sector, continued to grow on the back of a worldwide boom in demand for semiconductors for use in personal computers, mobile communications devices and other electronic devices. In December 1996, Tokuyama finished expanding



production capacity for polycrystalline silicon to stay abreast of burgeoning demand, realizing total annual capacity of 3,000 tons.

In the medical field, new product introductions contributed to higher sales of dental materials. Sales of clinical diagnostic reagents and systems also rose. In fine chemicals, Tokuyama successfully brought to market active ingredients and processed intermediates for pharmaceuticals and agricultural chemicals. New plastic lens materials were also a boon for sales, especially in export markets. The company developed novel applications for its microporous films in construction materials in addition to their main use in sanitary products, thereby increasing sales of this product range.

Total research and development spending for the year was roughly ¥7.9 billion. The year marked the start of a new three-year business plan targeting further growth for the company. Following are some key R&D initiatives called for by the plan as well as the major focus for the year's R&D activities:



*Tokuyama Factory's cement plant is not only recycling internally generated waste, but is also aggressively bringing in and reusing waste from outside sources.*

- **Building on existing core business to expand into specialty product and newly developed businesses.** To this end, the company channeled R&D resources into related fields, and succeeded in raising efficiency in research activities.
- **Strengthening environmental response capabilities.** During the year, the Tokuyama Factory and other production facilities announced plans to achieve zero-emission production, and initiated research into technology to support the complete elimination of non-reused waste products. Cement operations pursued the development of technology for reusing waste efficiently as raw materials or fuel. Other

actions are targeting viable ways of assessing safety and environmental impact in new product development.

A breakdown of major R&D projects by fields is as follows:

### Electronic Chemicals

Basic research in electronic chemicals bore fruit during the year: the development of a tin oxide fiber. The new fiber is drawing attention in the industry as a key material for next-generation lightweight batteries.

### Fine Chemicals

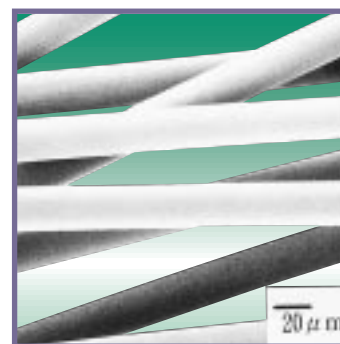
Achievements in fine chemicals included the successful development and commercialization of a novel X-ray contrast agent. Tokuyama also developed a surface-treated fumed silica, and began marketing this product for use in toner for ink-jet printers. In dental materials, the company developed and began sales of adhesive resin cement for the temporary fixation of loose teeth.

### Building Materials

Plastic sash activities were highlighted by the development of a wood-grain sash.

### Household Products

The company developed and commercialized *Muko Monogatari*, a fragrance-free household deodorizer.



*The length, diameter and electrical conductivity of tin oxide fiber can be easily controlled. The material also confers higher conductivity than its powdered form (electron microscope image).*

## New Singapore Base to Serve Semiconductor Market

Tokuyama is expanding vigorously in Southeast Asia, where demand for electronic materials such as semiconductor base materials and solvents is skyrocketing. Tokuyama located its first sales and marketing base for Southeast Asia in Singapore. Since October 1996, this wholly-owned subsidiary, Tokuyama Asia Pacific Pte. Ltd., has been marketing silica, electronic materials, fine chemicals and medical products to customers throughout the region. Another Singaporean subsidiary, Tokuyama Electronic Chemicals Pte. Ltd., has recently finished building a factory to produce semiconductor cleaning agents and developer. Production began in July 1997.

## Ushibori OPP Film Plant Signals Domestic Expansion

*A look inside the new Ushibori Plant of Tokuyama Film.*



In May 1997, wholly-owned subsidiary Tokuyama Film Co., Ltd. completed construction of its new Ushibori Plant in Ibaraki Prefecture, about 80 kilometers northeast of Tokyo. Along with the Higashi Plant at Tokuyama Factory in western Japan, the new plant's 10,000-ton annual capacity brings total production capacity for biaxial-oriented polypropylene (OPP) film to 30,000 tons per year. Previously, all OPP film was produced and shipped from Tokuyama Factory. However, over 40 percent of OPP demand comes from the Kanto region of eastern Japan. Adjacent to the Ushibori Plant is subsidiary Tox Co., Ltd., which produces multi-layered film. The two facilities will focus on responding quickly to the needs of customers in the Kanto region. Both types of film are used in wrapping for food and textiles.

## New Vinyl Chloride Monomer Plant Goes On-Stream

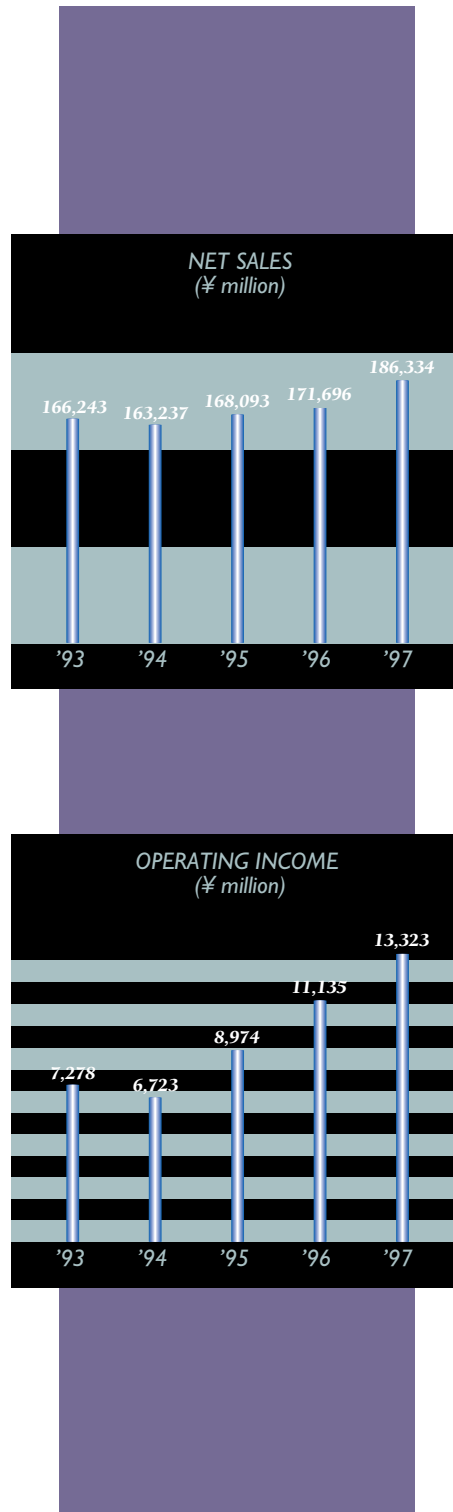
Subsidiary Sun Arrow Chemical Co., Ltd. finished building a new plant for vinyl chloride monomer in November 1996. Located within the company's main production complex in Tokuyama City, the plant began operations the following month. Annual capacity is about 300,000 tons, which ranks this plant among the largest plants in the world. In its oxychlorination process, the plant uses a distinctive synthesis method that is more environmentally friendly than traditional methods. This change is in line with Tokuyama's company-wide Responsible Care drive.



*The new vinyl chloride monomer plant of Sun Arrow Chemical.*

## Income Analysis

Net sales in fiscal 1996, the year ended March 31, 1997, rose 8.5 percent to ¥186,334 million (US\$1,503 million). This was the result of substantial sales gains in all divisions, especially plastics and specialty products. Despite a 10.4 percent increase in the cost of sales, gross profit was up 5.1 percent to ¥64,709 million (US\$522 million). Efforts to rationalize distribution expenses and various administrative costs were chiefly responsible for holding the increase in selling, general and administrative expenses to 1.9 percent. Operating income jumped 19.6 percent to ¥13,323 million (US\$107 million) as a result. The ratio of operating income to net sales was 7.1 percent, compared with 6.5 percent one year earlier. In other income (expenses), higher losses on the revaluation of investment securities raised net other expenses



7.9 percent to ¥3,285 million (US\$26 million). Income before income taxes was up 24.1 percent to ¥10,038 million (US\$81 million), while net income climbed 23.5 percent to ¥3,708 million (US\$30 million).

## Cash Flows

Net cash provided by operating activities totaled ¥25,213 million (US\$203 million), up 35.1 percent from the previous year's net cash of ¥18,659 million. This was primarily a factor of decreases in receivables and other current assets, offset somewhat by an increase in inventories and a decrease in income taxes payable.

Net cash used in investing activities rose 61.8 percent from the previous year's ¥18,293 million to ¥29,589 million (US\$239 million). The change was largely the result of an increase in capital expenditures.

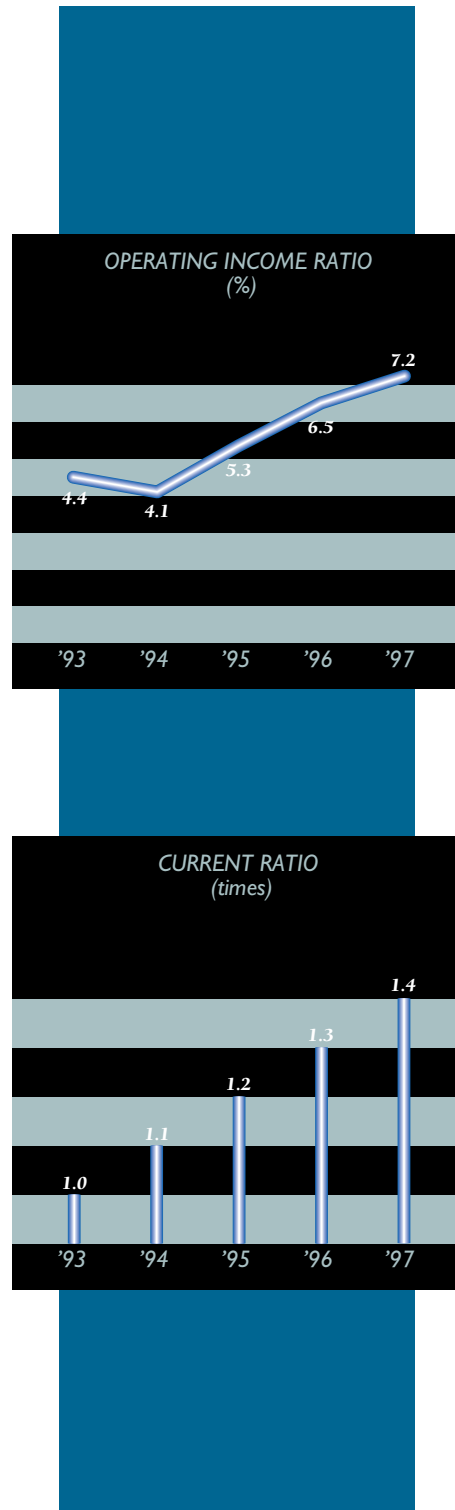
Net cash provided by financing activities fell 59.1 percent, from ¥16,966 million in the

previous year to ¥6,936 million (US\$56 million). This was largely due to proceeds from long-term debt, which were down from ¥10,702 million to ¥1,505 million (US\$12 million), combined with a decrease in proceeds from the issue of bonds.

Net cash provided by operating activities and financing activities more than offset net cash used in investing activities. As a result, cash and cash equivalents increased by ¥2,560 million to ¥27,754 million (US\$224 million) at year's end.

## Financial Position

Total assets at March 31, 1997 amounted to ¥260,535 million (US\$2,101 million), a 6.9 percent increase from a year earlier. Current assets rose 2.9 percent to ¥118,952 million (US\$959 million). As the level of current liabilities was virtually unchanged, the current ratio rose to 1.36 times from



1.32 times at the previous fiscal year end. Investments and other assets advanced 5.3 percent to ¥41,387 million (US\$334 million). Net property, plant and equipment jumped 12.7 percent to ¥100,196 million (US\$808 million), mainly a reflection of substantial investments in machinery and equipment associated with the expansion of polycrystalline silicon production. Total liabilities at the end of the year were ¥168,318 million (US\$1,357 million), a 9.5 percent increase over the previous fiscal year end. The most significant component of this increase were ¥15.0 billion from corporate bond issues made in July 1996 and March 1997. Shareholders' equity rose 2.4 percent to ¥92,217 million (US\$744 million), almost entirely a factor of higher retained earnings. The equity ratio was 35.4 percent, compared with 37.0 percent a year earlier.

### Non-Consolidated Balance Sheets

ASSETS	Millions of yen		Thousands of U.S. dollars (Note 2)
	1997	1996	1997
<b>Current assets:</b>			
Cash and cash equivalents . . . . .	¥ 27,754	¥ 25,194	\$ 223,819
Marketable securities (Note 4) . . . . .	3,527	2,545	28,443
Short-term investments . . . . .	7,976	8,638	64,326
Notes and accounts receivable:			
Subsidiaries and affiliates . . . . .	12,888	12,273	103,936
Trade . . . . .	47,415	49,913	382,380
Less allowance for doubtful accounts . . . . .	(1,121)	(776)	(9,040)
	<u>59,182</u>	<u>61,410</u>	<u>477,276</u>
Inventories (Note 5) . . . . .	15,044	12,157	121,320
Other current assets . . . . .	5,469	5,695	44,102
Total current assets . . . . .	<u>118,952</u>	<u>115,639</u>	<u>959,286</u>
<b>Investments and other assets:</b>			
Investments in securities (Note 6) . . . . .	13,707	13,594	110,541
Investments in and advances to subsidiaries and affiliates . . . . .	21,887	19,464	176,508
Other assets . . . . .	5,793	6,229	46,716
	<u>41,387</u>	<u>39,287</u>	<u>333,765</u>
<b>Property, plant and equipment (Note 6):</b>			
Land . . . . .	17,177	16,462	138,524
Buildings and structures . . . . .	57,597	53,737	464,495
Machinery and equipment . . . . .	267,792	249,189	2,159,613
Construction in progress . . . . .	6,508	7,610	52,486
	<u>349,074</u>	<u>326,998</u>	<u>2,815,118</u>
Less accumulated depreciation . . . . .	(248,878)	(238,111)	(2,007,084)
	<u>100,196</u>	<u>88,887</u>	<u>808,034</u>
	<u>¥ 260,535</u>	<u>¥ 243,813</u>	<u>\$ 2,101,085</u>

See notes to non-consolidated financial statements.

LIABILITIES AND SHAREHOLDERS' EQUITY	Millions of yen		Thousands of U.S. dollars (Note 2)
	1997	1996	1997
<b>Current liabilities:</b>			
Short-term bank loans (Note 6) . . . . .	¥ 23,035	¥ 23,013	\$ 185,766
Current portion of long-term debt (Note 6) . . . . .	2,098	8,031	16,916
Accounts payable:			
Subsidiaries and affiliates . . . . .	6,038	5,906	48,696
Trade . . . . .	35,095	30,729	283,026
Others . . . . .	3,563	2,487	28,729
	<u>44,696</u>	<u>39,122</u>	<u>360,451</u>
Accrued expenses . . . . .	7,514	6,771	60,599
Income taxes payable (Note 7) . . . . .	3,725	4,192	30,041
Other current liabilities (Note 8) . . . . .	6,199	6,310	49,988
Total current liabilities . . . . .	<u>87,267</u>	<u>87,439</u>	<u>703,761</u>
<b>Long-term liabilities:</b>			
Long-term debt, less current portion (Note 6) . . . . .	71,764	57,386	578,739
Accrued retirement and severance benefits (Note 9) . . . . .	9,112	8,756	73,486
Other . . . . .	175	135	1,415
Total long-term liabilities . . . . .	<u>81,051</u>	<u>66,277</u>	<u>653,640</u>
<b>Contingent liabilities</b> (Note 14)			
<b>Shareholders' equity</b> (Note 10):			
Common stock, ¥50 par value:			
Authorized — 700,000,000 shares;			
Issued and outstanding —			
254,971,876 shares at March 31, 1997 and 1996 . . . . .	19,274	19,274	155,435
Additional paid-in capital . . . . .	22,895	22,895	184,637
Legal reserve . . . . .	3,366	3,206	27,141
Retained earnings . . . . .	46,682	44,722	376,471
Total shareholders' equity . . . . .	<u>92,217</u>	<u>90,097</u>	<u>743,684</u>
	<u>¥260,535</u>	<u>¥243,813</u>	<u>\$2,101,085</u>



### Non-Consolidated Statements of Shareholders' Equity

	Shares of common stock (thousands)	Millions of yen			
		Common stock	Additional paid-in capital	Legal reserve	Retained earnings
<b>Balance at March 31, 1995</b> .....	254,972	¥19,274	¥22,895	¥3,047	¥43,462
Net income .....	—	—	—	—	3,002
Cash dividends paid (¥6.00 per share) .....	—	—	—	—	(1,529)
Bonuses to directors and statutory auditors .....	—	—	—	—	(54)
Transfer to legal reserve .....	—	—	—	159	(159)
<b>Balance at March 31, 1996</b> .....	254,972	19,274	22,895	3,206	44,722
Net income .....	—	—	—	—	3,708
Cash dividends paid (¥6.00 per share) .....	—	—	—	—	(1,530)
Bonuses to directors and statutory auditors .....	—	—	—	—	(58)
Transfer to legal reserve .....	—	—	—	160	(160)
<b>Balance at March 31, 1997</b> .....	<u>254,972</u>	<u>¥19,274</u>	<u>¥22,895</u>	<u>¥3,366</u>	<u>¥46,682</u>

	Thousands of U.S. dollars (Note 2)			
	Common stock	Additional paid-in capital	Legal reserve	Retained earnings
<b>Balance at March 31, 1996</b> .....	\$155,435	\$184,637	\$25,855	\$360,659
Net income .....	—	—	—	29,903
Cash dividends paid (¥6.00 per share) .....	—	—	—	(12,337)
Bonuses to directors and statutory auditors .....	—	—	—	(468)
Transfer to legal reserve .....	—	—	1,286	(1,286)
<b>Balance at March 31, 1997</b> .....	<u>\$155,435</u>	<u>\$184,637</u>	<u>\$27,141</u>	<u>\$376,471</u>

See notes to non-consolidated financial statements.

### Non-Consolidated Statements of Cash Flows

	Millions of yen		Thousands of U.S. dollars (Note 2)
	1997	1996	1997
<b>Cash flows from operating activities:</b>			
Net income	¥ 3,708	¥ 3,002	\$ 29,903
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization	14,673	15,295	118,327
Provision for retirement and severance benefits, less payments	356	136	2,872
(Gain) loss on sales and disposal of property, plant and equipment	(95)	178	(767)
Write-down of investment securities	1,316	988	10,616
Payment of directors' bonuses	(58)	(54)	(468)
Decrease (increase) in receivables	2,228	(6,812)	17,970
Increase in inventories	(2,887)	(287)	(23,276)
Decrease (increase) in other current assets	226	(1,828)	1,823
Increase in payables	5,574	5,932	44,953
Increase in accrued expenses	743	2	5,991
(Decrease) increase in income taxes payable	(467)	3,621	(3,767)
Decrease in other current liabilities	(111)	(1,335)	(895)
Other-net	7	(179)	54
Net cash provided by operating activities	<u>25,213</u>	<u>18,659</u>	<u>203,336</u>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(25,631)	(16,647)	(206,705)
Proceeds from sales of property, plant and equipment	214	59	1,723
Payment for purchase of investment securities	(1,429)	(863)	(11,529)
Increase in investments in and advances to subsidiaries and affiliates	(2,423)	(3,678)	(19,544)
(Increase) decrease in marketable securities	(982)	482	(7,916)
Decrease in short-term investments	662	2,354	5,338
Net cash used in investing activities	<u>(29,589)</u>	<u>(18,293)</u>	<u>(238,633)</u>
<b>Cash flows from financing activities:</b>			
Proceeds from issue of bonds	15,000	20,000	120,968
Redemption of warrants and bonds	(5,700)	(4,000)	(45,968)
Increase in short-term bank loans	22	-	177
Proceeds from long-term debt	1,505	10,702	12,139
Repayment of long-term debt	(2,361)	(8,207)	(19,040)
Cash dividends paid	(1,530)	(1,529)	(12,337)
Net cash provided by financing activities	<u>6,936</u>	<u>16,966</u>	<u>55,939</u>
Net increase in cash and cash equivalents	2,560	17,332	20,642
Cash and cash equivalents at beginning of year	25,194	7,862	203,177
Cash and cash equivalents at end of year	<u>¥ 27,754</u>	<u>¥ 25,194</u>	<u>\$ 223,819</u>
<b>Additional cash flow information:</b>			
Interest	¥ 2,867	¥ 2,999	\$ 23,121
Income taxes	6,644	1,302	53,581

See notes to non-consolidated financial statements.

## Notes to Non-Consolidated Financial Statements

### 1. Basis of presenting the financial statements

The accompanying non-consolidated financial statements include only the accounts of Tokuyama Corporation (the “Company”) and are prepared on the basis of accounting principles and practices generally accepted in Japan and from the financial statements filed with the Minister of Finance as required by the Securities and Exchange Law of Japan.

In preparing the non-consolidated financial statements for purposes of inclusion in these financial statements, certain items presented in the original financial statements have been reclassified and summarised for readers outside Japan. In addition, the accompanying footnotes include information which is not required under accounting principles and practices generally accepted in Japan, but is presented as additional information in this document.

### 2. U.S. dollar amounts

The United States dollar amounts included in the accompanying non-consolidated financial statements and related notes represent the arithmetic results of translating Japanese yen into U.S. dollars at the rate of ¥124=US\$1, the approximate exchange rate on March 31, 1997. The U.S. dollar amounts are included solely for the convenience of the reader, and it should not be construed that the assets and liabilities, expressed in U.S. dollar equivalents, can actually be realised in or be extinguished by U.S. dollars at the exchange rate used in the accompanying translation.

### 3. Summary of significant accounting policies

#### *Foreign Currencies:*

Current monetary assets and liabilities in foreign currencies have been translated into Japanese yen at the applicable current rates. Long-term monetary assets and liabilities denominated in foreign currencies, except for those hedged by forward exchange contracts, have been translated at the historical rates. The exchange differences arising from such forward exchange contracts are deferred and amortized over the remaining life of those contracts.

#### *Cash Equivalents:*

The Company considers all highly liquid time deposits with a maturity of three months or less to be cash equivalents.

#### *Marketable Securities and Investments in Securities:*

Securities which are listed on stock exchanges except for investment in subsidiaries are valued at the lower of cost or market, cost being determined by the moving average method. Securities which are not listed on stock exchanges are valued at cost, cost being determined by the moving average method.

#### *Inventories:*

Inventories are stated at the lower of cost or market value, cost being determined by the moving average method.

#### *Property, Plant and Equipment:*

Property, plant and equipment are stated at cost. Depreciation is computed by the declining-balance method at the rates based on the estimated useful lives of assets which are prescribed by Japanese income tax law. The range of the estimated useful lives is principally from 3 to 65 years for buildings and structures and from 2 to 20 years for machinery and equipment.

Provision for additional depreciation is made to reflect the use of machinery and equipment in excess of the normal production schedule, which computation is adopted in accordance with Japanese tax regulations. Significant renewals and betterments are capitalised at cost. Maintenance expenses are charged to income as incurred. Repair expenses are charged to income.

#### *Research and Development Expenses:*

Research and development expenses are charged to income as incurred.

#### *Income Taxes:*

Income taxes are calculated on taxable income and charged to income on an accrual basis. Deferred income taxes arising from timing differences between financial and tax reporting are not recognised.

---

#### *Retirement and Severance Benefits:*

Employees who terminate employment are entitled, under most circumstances, to lump-sum payments determined by current basic rate of pay, length of service, position in the Company, and conditions under which the termination occurs. The minimum payment is an amount based on voluntary retirement.

The Japanese tax law sets the limit of allowable deductions for accrued retirement and severance benefits as 40 percent of the voluntary liability. The Company generally records 40 percent of the voluntary liability in accordance with the law.

Also, the Company has a non-contributory pension plan which will generally provide for a quarterly allowance payable subsequent to retirement. The plan is to be funded to the extent of 55 percent by this trusted pension plan to cover employees who terminated employment with over twenty years of service.

#### *Net Income per Share:*

The computation of net income per share is based on the weighted average number of shares outstanding during each period.

#### **4. Marketable securities**

Marketable securities at March 31, 1997 and 1996 were as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Listed common stocks . . . . .	<u>¥ 954</u>	¥ 543	<u>\$ 7,690</u>
Bonds and other . . . . .	<u>2,573</u>	<u>2,002</u>	<u>20,753</u>
	<u>¥3,527</u>	<u>¥2,545</u>	<u>\$28,443</u>

#### **5. Inventories**

Inventories at March 31, 1997 and 1996 were as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Finished products . . . . .	<u>¥ 9,254</u>	¥ 7,484	<u>\$ 74,628</u>
Work in progress . . . . .	<u>2,406</u>	1,910	<u>19,407</u>
Raw materials . . . . .	<u>2,131</u>	1,562	<u>17,181</u>
Supplies . . . . .	<u>1,253</u>	1,201	<u>10,104</u>
	<u>¥15,044</u>	<u>¥12,157</u>	<u>\$121,320</u>

## 6. Short-term bank loans and long-term debt

Short-term bank loans at March 31, 1997 are bank loans which are due principally in 365 days and bear interest at rates ranging from 0.80 percent to 1.625 percent per annum.

A summary of long-term debt at March 31, 1997 and 1996 is as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Loans principally from banks and insurance companies, due through 2007			
with interest ranging from 1.91 percent to 6.00 percent . . . . .	<b>¥23,962</b>	¥24,817	<b>\$193,235</b>
2.2 percent convertible bonds in yen			
due September 30, 2003 . . . . .	<b>9,900</b>	9,900	<b>79,839</b>
6.0 percent unsecured bonds in Euroyen due August 27, 1996 . . . . .	—	5,700	—
4.25 percent unsecured bonds in yen due August 9, 2001 . . . . .	<b>5,000</b>	5,000	<b>40,323</b>
2.75 percent unsecured bonds in yen due June 14, 2002 . . . . .	<b>10,000</b>	10,000	<b>80,645</b>
2.9 percent unsecured bonds in yen due February 15, 2003 . . . . .	<b>10,000</b>	10,000	<b>80,645</b>
2.75 percent unsecured bonds in yen due July 10, 2001 . . . . .	<b>10,000</b>	—	<b>80,645</b>
2.45 percent unsecured bonds in yen due March 26, 2004 . . . . .	<b>5,000</b>	—	<b>40,323</b>
	<b>73,862</b>	65,417	<b>595,655</b>
Less current maturities . . . . .	<b>(2,098)</b>	(8,031)	<b>(16,916)</b>
	<b>¥71,764</b>	¥57,386	<b>\$578,739</b>

The aggregate annual maturities of long-term debt at March 31, 1997 are summarised as follows:

	Millions of yen	Thousands of U.S. dollars
Year ending March 31		
1998 . . . . .	<b>¥ 2,098</b>	<b>\$ 16,916</b>
1999 . . . . .	<b>7,853</b>	<b>63,334</b>
2000 . . . . .	<b>3,966</b>	<b>31,982</b>
2001 . . . . .	<b>2,643</b>	<b>21,315</b>
2002 . . . . .	<b>17,362</b>	<b>140,013</b>
Thereafter . . . . .	<b>39,940</b>	<b>322,095</b>
	<b>¥73,862</b>	<b>\$595,655</b>

Assets of the Company pledged as collateral for certain loans and other liabilities at March 31, 1997 and 1996, are summarised as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Property, plant and equipment . . . . .	<b>¥27,545</b>	¥31,776	<b>\$222,139</b>
Investments in securities . . . . .	<b>17</b>	17	<b>136</b>
	<b>¥27,562</b>	¥31,793	<b>\$222,275</b>

Loans, principally from banks and insurance companies, aggregating ¥7,289 million (\$58,782 thousand) at March 31, 1997, are secured by an enterprise mortgage amounting to ¥27,545 million (\$222,139 thousand).

Additional information with respect to the company's convertible bonds outstanding at March 31, 1997 is as follows:

	Convertible price per share	Convertible at any time up to and including
2.2 percent convertible bonds in yen due September 30, 2003 . . . . .	¥827.80	September 29, 2003

Under the provisions of the issues the conversion price is subject to adjustment in certain cases, which include the payment of stock dividends and the free distribution of shares. If all the outstanding convertible bonds had been converted at March 31, 1997, approximately 11,959 thousand additional shares of common stock would have been issued.

### 7. Income taxes

The Company is subject to several taxes based on income which, in the aggregate, resulted in a normal tax rate of approximately 51 percent for 1997 and 1996.

The effective tax rates reflected in the statements of income differ from the normal tax rates primarily because of the effect of timing differences in the recognition of certain income and expenses for tax and financial reporting purposes, the effect of permanent non-deductible expenses, tax exemptions for dividend income received from Japanese companies and tax credit for certain qualified expenditures.

### 8. Other current liabilities

At March 31, 1997 and 1996 other current liabilities consisted of the following:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Guarantee deposits . . . . .	¥5,464	¥5,494	\$44,067
Other . . . . .	735	816	5,921
	<u>¥6,199</u>	<u>¥6,310</u>	<u>\$49,988</u>

### 9. Retirement and severance plan

Retirement and severance plan expenses charged to operations for the years ended March 31, 1997 and 1996, were as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Funded pension plan . . . . .	¥ 534	¥ 541	\$ 4,305
Accrued retirement and severance benefits . . . . .	1,082	1,226	8,729
	<u>¥1,616</u>	<u>¥1,767</u>	<u>\$13,034</u>

## 10. Shareholders' equity

The Commercial Code of Japan provides that an amount equivalent to at least 10 percent of cash payment shall be appropriated as a legal reserve until such reserve equals 25 percent of stated capital. The Code also provides that neither additional paid-in capital nor legal reserve is available for dividends, but both may be used to reduce a deficit by resolution of the shareholders or may be capitalised in the form of free distributions of shares by resolution of the Board of Directors.

The Commercial Code of Japan provides that the entire amount of paid-in capital on new share issues, including shares issued upon conversion of bonds and exercise of warrants, shall generally be included in the common stock account. However, an amount equal to or less than 50 percent of the issue price of shares may be transferred to the additional paid-in capital account on the condition that at least the par value per share is included in the common stock account.

Under the Commercial Code of Japan, the amount available for dividends is based upon retained earnings as recorded by the Company. At March 31, 1997, the amount available for dividends, subject to the legal reserve requirements, was ¥45,229 million (\$364,753 thousand).

The following appropriations of retained earnings, which have not been reflected in the financial statements as at March 31, 1997, were proposed on May 15, 1997 by the Board of Directors and were approved at the annual shareholders' meeting on June 27, 1997:

	Millions of yen	Thousands of U.S. dollars
Cash dividends . . . . .	¥765	\$6,169
Transfer to legal reserve . . . . .	83	669
Bonuses to directors and statutory auditors . . . . .	62	500
	<u>¥910</u>	<u>\$7,338</u>

## 11. Sales to and purchases from subsidiaries and affiliates

Sales to and purchases from subsidiaries and affiliates for the years ended March 31, 1997 and 1996, were as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Sales . . . . .	¥33,265	¥29,181	\$268,267
Purchases . . . . .	28,525	27,718	230,040

## 12. Research and development expenses

Research and development expenses presented in general and administrative expenses for the years ended March 31, 1997 and 1996, were as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Research and development expenses . . . . .	¥6,339	¥6,575	\$51,122

### 13. Other income (expenses)

“Other– net” in “Other income (expenses)” for the years ended March 31, 1997 and 1996 is as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
Loss on disposal of property and equipment . . . . .	¥ (77)	¥ (178)	\$ (621)
Gain on sales of property and equipment . . . . .	172	–	1,388
Write-down of investment securities . . . . .	(1,316)	(988)	(10,616)
Loss resulting from assistance of subsidiaries . . . . .	–	(601)	–
Other . . . . .	(247)	656	(1,987)
	<u>¥(1,468)</u>	<u>¥(1,111)</u>	<u>\$(11,836)</u>

### 14. Contingent liabilities

At March 31, 1997 and 1996, the Company was contingently liable as follows:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
As guarantor of indebtedness of subsidiaries, affiliates and others . . . . .	¥10,128	¥8,092	\$81,676

**Report of Independent Certified Public Accountants on the  
Non-Consolidated Financial Statements**

---

The Board of Directors  
Tokuyama Corporation

We have audited the non-consolidated balance sheets of Tokuyama Corporation as of March 31, 1997 and 1996, and the related non-consolidated statements of income, shareholders' equity and cash flows for the years then ended, all expressed in Japanese yen. Our examinations were made in accordance with auditing standards generally accepted in Japan and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying non-consolidated financial statements, expressed in Japanese yen, present fairly the non-consolidated financial position of Tokuyama Corporation as of March 31, 1997 and 1996, and non-consolidated results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in Japan applied on a consistent basis.

The U.S. dollar amounts in the accompanying non-consolidated financial statements with respect to the year ended March 31, 1997 are presented solely for convenience. Our examination also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 2 to the non-consolidated financial statements.

*Yamaguchi Audit Corporation*

YAMAGUCHI Audit Corporation

Tokuyama, Japan  
June 30, 1997

---

**Consolidated Balance Sheets**

ASSETS	Millions of yen		Thousands of U.S. dollars (Note 2)
	1997	1996	1997
<b>Current assets:</b>			
Cash and cash equivalents . . . . .	¥ 30,009	¥ 27,542	\$ 242,009
Time deposits . . . . .	61	48	493
Marketable securities . . . . .	3,677	2,689	29,651
Short-term investments . . . . .	5,510	4,955	44,437
Notes and accounts receivable:			
Unconsolidated subsidiaries and affiliates . . . . .	8,624	8,841	69,553
Trade . . . . .	58,959	60,032	475,476
Less allowance for doubtful accounts . . . . .	(961)	(643)	(7,752)
	<u>66,622</u>	<u>68,230</u>	<u>537,277</u>
Inventories . . . . .	19,727	15,708	159,086
Other current assets . . . . .	2,990	4,139	24,117
Total current assets . . . . .	<u>128,596</u>	<u>123,311</u>	<u>1,037,070</u>
<b>Investments and other assets:</b>			
Investments in securities . . . . .	15,331	13,775	123,641
Investments in and advances to unconsolidated subsidiaries and affiliates . .	15,530	16,232	125,239
Other assets . . . . .	7,722	8,181	62,272
	<u>38,583</u>	<u>38,188</u>	<u>311,152</u>
<b>Property, plant and equipment:</b>			
Land . . . . .	20,366	19,488	164,241
Buildings and structures . . . . .	67,107	63,046	541,185
Machinery and equipment . . . . .	291,663	270,106	2,352,123
Construction in progress . . . . .	6,843	10,832	55,184
	<u>385,979</u>	<u>363,472</u>	<u>3,112,733</u>
Less accumulated depreciation . . . . .	(263,816)	(255,063)	(2,127,550)
	<u>122,163</u>	<u>108,409</u>	<u>985,183</u>
	<u>¥ 289,342</u>	<u>¥ 269,908</u>	<u>\$ 2,333,405</u>

See notes to consolidated financial statements.

LIABILITIES AND SHAREHOLDERS' EQUITY	Millions of yen		Thousands of U.S. dollars (Note 2)
	1997	1996	1997
<b>Current liabilities:</b>			
Short-term bank loans . . . . .	¥ 30,540	¥ 28,805	\$ 246,287
Current portion of long-term debt . . . . .	3,469	9,357	27,977
Accounts payable:			
Unconsolidated subsidiaries and affiliates . . . . .	2,597	2,477	20,945
Trade . . . . .	43,401	37,812	350,013
Others . . . . .	4,723	3,349	38,085
	<u>50,721</u>	<u>43,638</u>	<u>409,043</u>
Accrued expenses . . . . .	8,517	7,603	68,688
Income taxes payable . . . . .	4,445	4,575	35,847
Other current liabilities . . . . .	6,423	6,640	51,798
Total current liabilities . . . . .	<u>104,115</u>	<u>100,618</u>	<u>839,640</u>
<b>Long-term liabilities:</b>			
Long-term debt, less current portion . . . . .	80,796	65,612	651,582
Accrued retirement and severance benefits . . . . .	9,552	9,196	77,030
Other . . . . .	630	809	5,084
Total long-term liabilities . . . . .	<u>90,978</u>	<u>75,617</u>	<u>733,696</u>
<b>Minority interests . . . . .</b>	<u>522</u>	<u>456</u>	<u>4,211</u>
<b>Contingent liabilities (Note 3)</b>			
<b>Shareholders' equity:</b>			
Common stock . . . . .	19,274	19,274	155,435
Additional paid-in capital . . . . .	22,895	22,895	184,637
Legal reserve . . . . .	3,457	3,295	27,881
Retained earnings . . . . .	48,104	47,756	387,932
	<u>93,730</u>	<u>93,220</u>	<u>755,885</u>
Less treasury stock, at cost . . . . .	(3)	(3)	(27)
Total shareholders' equity . . . . .	<u>93,727</u>	<u>93,217</u>	<u>755,858</u>
	<u>¥289,342</u>	<u>¥269,908</u>	<u>\$2,333,405</u>



## Notes to Consolidated Financial Statements

### 1. Summary of significant accounting policies

#### *Basis of presenting the financial statements:*

The accompanying consolidated financial statements have been prepared on the basis of accounting principles and practices generally accepted in Japan and from the financial statements filed with the Minister of Finance as required by the Securities and Exchange Law of Japan with reclassification of certain items.

#### *Principles of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates:*

The consolidated financial statements include the accounts of the Company and its significant subsidiaries. Significant intercompany balances, transactions and unrealised profits have been eliminated in consolidation.

Investments in significant affiliates (20 percent to 50 percent owned) are accounted for by the equity method. Consolidated net income includes the Company's equity in the current net income of such companies after elimination of unrealised intercompany profits.

Investments in unconsolidated subsidiaries and affiliates not accounted for on an equity method are carried at cost.

#### *Other accounting principles and practices employed by the Company and its subsidiaries:*

Significant accounting principles and practices employed by the Company and its subsidiaries are explained in Note 3 of the notes to non-consolidated financial statements. Therefore, the accompanying consolidated financial statements should be read in conjunction with such notes.

### 2. U.S. dollar amounts

See Note 2 to the non-consolidated financial statements.

### 3. Contingent liabilities

The Company and its consolidated subsidiaries had the following contingent liabilities at March 31, 1997 and 1996:

	Millions of yen		Thousands of U.S. dollars
	1997	1996	1997
As endorser of trade notes discounted or endorsed . . . . .	<b>¥2,352</b>	¥3,418	<b>\$18,964</b>
As guarantor of indebtedness of unconsolidated subsidiaries, affiliates and others . . . . .	<b>9,913</b>	7,783	<b>79,943</b>

**Report of Independent Certified Public Accountants on the  
Consolidated Financial Statements**

---

The Board of Directors  
Tokuyama Corporation

We have audited the consolidated balance sheets of Tokuyama Corporation and consolidated subsidiaries as of March 31, 1997 and 1996, and the related consolidated statements of income and retained earnings for the years then ended, all expressed in Japanese yen. Our examinations were made in accordance with auditing standards generally accepted in Japan and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying consolidated financial statements, expressed in Japanese yen, present fairly the consolidated financial position of Tokuyama Corporation and consolidated subsidiaries as of March 31, 1997 and 1996, and consolidated results of their operations for the years then ended, in conformity with accounting principles generally accepted in Japan applied on a consistent basis.

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended March 31, 1997 are presented solely for convenience. Our examination also included the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 2 to the consolidated financial statements.

*Yamaguchi Audit Corporation*

YAMAGUCHI Audit Corporation

Tokuyama, Japan  
June 30, 1997

---

### Consolidated Six-Year Summary

	Millions of yen						Thousands of U.S. dollars
	1997	1996	1995	1994	1993	1992	1997
<b>Results of operations:</b>							
Net sales . . . . .	<b>¥216,664</b>	¥197,241	¥191,070	¥179,180	¥183,573	¥190,566	<b>\$1,747,293</b>
Cost of sales . . . . .	<b>144,748</b>	127,215	124,080	117,719	119,438	124,194	<b>1,167,324</b>
Operating income . . . . .	<b>14,371</b>	13,232	10,215	5,496	6,466	9,823	<b>115,899</b>
Net income . . . . .	<b>2,077</b>	3,638	3,899	1,038	304	3,156	<b>16,750</b>
Net income per share . . . . .	<b>8.15</b>	14.27	15.29	4.07	1.19	12.38	<b>0.066</b>
Cash dividends per share . . . . .	<b>6.00</b>	6.00	6.00	6.00	6.00	6.00	<b>0.048</b>
<b>Financial position:</b>							
Property, plant and equipment . . . . .	<b>122,163</b>	108,409	104,770	97,301	102,402	105,651	<b>985,183</b>
Total assets . . . . .	<b>289,342</b>	269,908	241,222	219,639	244,362	250,994	<b>2,333,405</b>
Long-term debt, less current portion . . . . .	<b>80,796</b>	65,612	48,239	41,653	41,198	55,450	<b>651,582</b>
Total liabilities . . . . .	<b>195,615</b>	176,691	150,058	130,374	154,562	160,039	<b>1,577,547</b>
Shareholders' equity . . . . .	<b>93,727</b>	93,217	91,164	89,265	89,800	90,955	<b>755,858</b>

Note: U.S. dollar amounts are translated from Japanese yen, for convenience only, at the rate of ¥124=US\$1.

## Major Subsidiaries and Affiliates

(As of July 31, 1997)

Company	Capital (¥ millions)	Ownership (%)	Scope
<b>Chemicals</b>			
•MTT Ltd.	¥ 600	100	Production of epichlorohydrin
Sodegaura Chemical Ltd.	50	60	Production and sale of liquid chlorine
*Nishinihon Resicoat Co., Ltd.	50	50	Manufacture of rust-preventive coating for metals
Tomakomai Kasei Co., Ltd.	10	50	Sale of sodium sulfite
Hoechst Tokuyama Limited	1,000	40	Production and sale of layered silicate
Chiba Chlorine & Alkali Co., Ltd.	1,600	22	Production and sale of chlorine and caustic soda
<b>Cement &amp; Construction Materials</b>			
•Tokuyama Ready Mixed Concrete Co., Ltd.	100	100	Production and sale of ready-mixed concrete
•Seibu Tokuyama Ready Mixed Concrete Co., Ltd.	100	100	Production and sale of ready-mixed concrete
•Kyushu Tokuyama Ready Mixed Concrete Co., Ltd.	50	100	Production and sale of ready-mixed concrete
•Kawasaki Tokuyama Ready Mixed Concrete Co., Ltd.	40	100	Production and sale of ready-mixed concrete
•Sanyo Tokuyama Ready Mixed Concrete Co., Ltd.	50	85	Production and sale of ready-mixed concrete
Chugoku Ready Mixed Concrete Co., Ltd.	80	50	Production and sale of ready-mixed concrete
T & T Co., Ltd.	30	50	Sale of road-construction materials, contract work for foundations
Sanyo Precon Co., Ltd.	49	45.3	Production of pre-cast concrete curtain walls
Mizushima Riverment Corporation	250	24.5	Production under license of blast furnace slag cement
•Shanon Co., Ltd.	30	100	Production of plastic windows
•Hokkaido Shanon Co., Ltd.	30	100	Sale of plastic windows
•Shanon Tohoku Trading Co., Ltd.	30	100	Sale of plastic windows
•Shanon Sales East Japan Co., Ltd.	30	100	Sale of plastic windows
•Tokuso Trading Co., Ltd.	50	100	Sale of construction materials
•Tohoku Shanon Co., Ltd.	300	70	Production of plastic windows
•Shanon Kasei Corporation	100	*1 80	Production and sale of materials for plastic windows
<b>Plastics</b>			
•Sun Arrow Chemical Co., Ltd.	1,000	100	Production and sale of vinyl chloride monomer
*Shin Dai-ichi Vinyl Corporation	7,000	*2 30	Production and sale of polyvinyl chloride
Tokuyama Film Co., Ltd.	400	100	Production of plastic films
•Sun-Tox Co., Ltd.	100	70	Sale of plastic films
Tox Co., Ltd.	45	50	Production of plastic films
Tomitec Co., Ltd.	50	50	Production of plastic injection moldings
Dainippon Plastics Co., Ltd.	859	38.4	Production and sale of plastics
San-ei Polymer Co., Ltd.	30	35.2	Production and sale of plastics
*Nanbu Plastics Co., Ltd.	1,800	28.88	Production and sale of plastics
Daipia Hawer Pipe, Ltd.	200	20	Production and sale of wide-bored plastic pipes
Nishinippon Hawer Pipe, Ltd.	200	20	Production and sale of wide-bored plastic pipes
Shunan Polymer Ltd.	5	20	Production and sale of plastics
Watanabe Kasei Co., Ltd.	40	20	Production and sale of plastics
<b>Electronic Materials</b>			
•Figaro Engineering Inc.	48	100	Production and sale of sensor devices
Unirex Co., Ltd.	12	100	Design and sale of printed circuit boards
Tokuyama Toshiba Ceramics Co., Ltd.	1,600	30	Production and sale of quartz glass
<b>Medical</b>			
•A & T Corporation	378	67.5	Production and sale of diagnostic reagents and analyzers
Towa Giken Co., Ltd.	60	50	Production and sale of dental materials
<b>Transport</b>			
•Kiyō Kaiun Co., Ltd.	50	98	Transportation and warehousing
Tokuyama Unyu Co., Ltd.	24	25	Transportation
Tokuyama Bulk Terminal Co., Ltd.	10	20	Import, export and warehousing of coal, coke and petroleum

• Consolidated subsidiary

\* Subsidiary accounted for by equity method

\*1 Includes 30 percent ownership by Sun Arrow Chemical Co., Ltd.

\*2 Includes 20 percent ownership by Sun Arrow Chemical Co., Ltd.

Company	Capital (¥ millions)	Ownership (%)	Scope
<b>Others</b>			
ASTOM Co., Ltd.	400	50	Production of ion exchange membranes
Sanuki Engyo Co., Ltd.	495	20.2	Production and sale of salt
Oita Kogyo Co., Ltd.	125	25	Mining and sale of limestone
•Shunan System Sangyo Co., Ltd.	50	100	Real estate, civil engineering, construction
•Tokuyama Esuteto Co., Ltd.	100	100	Real estate
*Shunan Engineering & Manufacturing Corporation	35	100	Design and production of machines and plants
Shunan Swimming Club Co., Ltd.	50	100	Swimming school and athletic club

Company	Capital (in thousands local currencies)	Ownership (%)	Scope
<b>Overseas</b>			
Tokuyama America Inc.	US\$300	100	Sale of Tokuyama Group products
Tokuyama Europe GmbH	DM 500	100	Sale of Tokuyama Group products
Tokuyama Asia Pacific Pte. Ltd.	S\$800	100	Sale of Tokuyama Group products
Taiwan Tokuyama Corp.	NT\$205,000	100	Production and sale of solvent for semiconductor base materials
Tokuyama Electronic Chemicals Pte. Ltd.	S\$2,000	100	Production of solvent for semiconductor base materials
Hantok Chemicals Co., Ltd.	W2,500,000	50	Production and sale of developer for positive photoresists
General Ceramics, Inc.	US\$1	100	Production and sale of ceramics for use in the electronics industry
Tianjin Figaro Electronic Co., Ltd.	RMB¥23,670	29.6	Production and sale of sensor devices
Eurodia Industrie S.A.	Fr 2,000	70	Sale of ion exchange membranes and electrolysers
Tianjin Sunshine Plastics Co., Ltd.	RMB¥99,765	51.7	Production and sale of plastic film
Pornpat Chemicals Co., Ltd.	Baht 150,000	49	Production and sale of precipitated silica

- Consolidated subsidiary
- \* Subsidiary accounted for by equity method

## Directory

### Head Office

Shibuya Konno Bldg.  
3-1, Shibuya 3-chome  
Shibuya-ku, Tokyo 150  
Tel: (03) 3499-8937  
Fax: (03) 3499-8967

### Domestic Offices:

Sapporo, Sendai, Nagoya, Osaka,  
Hiroshima, Takamatsu, Fukuoka

### Research Laboratories:

Tsukuba, Fujisawa, Tokuyama

### Factories:

Tokuyama Factory  
1-1, Mikage-cho, Tokuyama  
Yamaguchi 745  
Tel: (0834) 21-4326  
Kashima Factory  
26 Sunayama, Hasaki-machi  
Kashima, Ibaraki 314-02  
Tel: (0479) 46-4700

### Overseas

**Tokuyama America Inc.**  
1875 South Grant Street, Suite 570  
San Mateo, CA 94402, U.S.A.  
Tel: 1-415-571-8872  
Fax: 1-415-571-8037

**General Ceramics, Inc.**  
2770 Coronado Street  
Anaheim, CA 92806, U.S.A.  
Tel: 1-714-630-2340  
Fax: 1-714-630-5730

16 First Avenue  
Haskell, NJ 07420, U.S.A.  
Tel: 1-937-839-1600  
Fax: 1-937-839-5716

**Tokuyama Europe GmbH**  
Oststrasse 10, 40211 Düsseldorf  
Germany  
Tel: 49-211-161893  
Fax: 49-211-357379

### Eurodia Industrie S.A.

14/16 Voie de Montavas  
91320 Wissous, France  
Tel: 33-1-60110694  
Fax: 33-1-69308595

### Pornpat Chemicals Co., Ltd.

787 Sukhumvit Road (SO1 43)  
Bangkok Bank Branch Bldg., 4th Fl.  
Bangkok 10110, Thailand  
Tel: 66-2-260-9009  
Fax: 66-2-260-9001

### Tianjin Figaro Electronic Co., Ltd.

China Tianjin Economic-Technological  
Development Zone, Wei-Shen Road 19  
Tianjin, 300457 China  
Tel: 86-22-25325908  
Fax: 86-22-25325908

### Tianjin Sunshine Plastics Co., Ltd.

Branch No. 2, No. 2 Rd.  
Xiqing Economic  
Development Zone  
Tianjin, 300381 China  
Tel: 86-22-23971442  
Fax: 86-22-23973464

### Hantok Chemicals Co., Ltd.

11th Fl. Daekyung Bldg., 120  
2-Ka, Taepyeong-Ro, Chung-ku  
Seoul, Korea, 100-102  
Tel: 82-2-772-1981  
Fax: 82-2-772-1986

### Taiwan Tokuyama Corp.

8F-3, No. 139, Sung Chiang Road  
Taipei, Taiwan, Republic of China  
Tel: 886-2-516-4511  
Fax: 886-2-517-7735

### Tokuyama Asia Pacific Pte. Ltd. (former Singapore office)

20 Cecil Street, #20-04/05  
The Exchange  
Singapore 049705  
Tel: 65-533-5258  
Fax: 65-532-5256

### Tokuyama Electronic Chemicals Pte. Ltd.

21 Gul Road, Singapore 629355  
Tel: 65-862-1081  
Fax: 65-862-1267

## Corporate Data

### Established:

February 16, 1918

### Capital:

¥19,274 million

### Employees:

2,879

### Shares authorized:

700,000,000

### Shares issued:

254,971,876

### Shareholders:

32,716

### Major Shareholders:

	Number of Shares Held (Thousand)	Percentage of Total Shares
Nippon Life Insurance Company . . . . .	17,184	6.74
The Sumitomo Trust & Banking Co., Ltd. . . . .	13,588	5.33
The Toyo Trust & Banking Co., Ltd. . . . .	13,155	5.16
The Sanwa Bank, Ltd. . . . .	12,737	5.00
The Meiji Mutual Life Insurance Company . . . . .	8,563	3.36
The Tokio Marine & Fire Insurance Company, Limited . . . . .	6,904	2.71
The Mitsubishi Trust & Banking Corporation . . . . .	6,665	2.61
Industrial Bank of Japan . . . . .	5,781	2.27
Nissho Iwai Corporation . . . . .	5,566	2.18
The Koa Fire & Marine Insurance Co., Ltd. . . . .	5,050	1.98

## Board of Directors and Responsibilities

### Chairman:

**Kaoru Tsuji**

### President:

**Yuichi Miura**

### Executive Managing Directors:

**Sumio Akiyama:** Research & Development Div./RC Administration Div./All Technical Affairs/Intellectual Property Dept./Kashima Factory

**Yoshihiko Nishino:** All Marketing Affairs/Branches

### Senior Managing Directors:

**Kazuo Shikata:** Tokuyama Factory

### Kazuhiko Nishimura:

Corporate Administration Div./Subsidiaries & Affiliates/  
Credit Management & Auditing Dept./  
SCC Project/Secretarial Dept.

### Yoshifumi Matsuda:

General & Personnel Affairs Div.

### Ken-ichiro Ueyama:

Electronic Materials Business Div.

### Teruyoshi Fukuda:

Cement Business Div.

### Koshi Kusumoto:

Corporate Planning Div.

**Tsugimori Kitade:** Plastic Films Business Div.

### Directors:

#### Kizo Nagasako:

Manufacturing Technology Div./  
Plant Maintenance Dept.

**Hiroaki Masaki:** Tokuyama Factory/  
Corporate Administration Div.

#### Shigeaki Nakahara:

Chemical Business Div.

**Kazuo Ikeda:** Corporate Planning Div./  
SCC Project Group

#### Kouichi Doi:

Research & Development Div./Tokuyama  
Research Laboratory

#### Hisami Tanimoto:

Tokuyama Factory/Quality Assurance Dept.

#### Go Yanagida:

Specialty Chemicals Business Div.

#### Yoshikazu Mizuno:

Plastics Business Div.

#### Standing Auditor:

Shigeyoshi Inoue

#### Auditors:

Hideyuki Hirashima  
Koshiro Suganuma  
Yoshio Taniguchi


**Products at a Glance**
**Chemical Business Division**

Soda ash  
 Sodium silicate cullet  
 Sodium silicate  
 Sodium bicarbonate  
 Calcium chloride (liquid, granular, flake)  
 Caustic soda (liquid, flake)  
 Liquid chlorine  
 Hydrochloric acid  
 Sodium hypochlorite  
 Methyl chloride  
 Methylene chloride  
 Chloroform  
 Propylene oxide  
 Epichlorohydrin  
 Ethylene dichloride  
 Isopropyl alcohol  
 Moisture absorbent  
 (household-use, industrial-use)  
 Dew absorbent tape  
 Dew collector  
 Water purifier  
 Non-fragrant deodorizer

**Cement Business Division**

Ordinary Portland cement  
 High early strength Portland cement  
 Blast furnace slag cement  
 Fly ash cement  
 Low heat cement  
 Ready-mixed concrete  
 Cement type stabilizer  
 Chemical grout  
 Antiwashout admixture  
 Artificial reef

**Shanon and Building Materials Division**

Plastic windows  
 Adiabatic sliding door  
 Ceiling hatch for insulation and  
 airtight applications  
 Premixed mortar for plastering  
 Cement mortar for self-leveling  
 Premixed mortar for tiles  
 Artesian water treatment form  
 Soundproof walling  
 Moisture-proof windbreak sheeting

**Plastics Business Division**

Polypropylene  
 Highly functional polypropylene  
 (crystal, sliding type)  
 Granular polypropylene  
 Compound polypropylene  
 Wood flour filled type polypropylene  
 Flame-retardant polypropylene  
 Highly functional master batch  
 Thermoplastic olefin elastomer  
 Biaxial-oriented polypropylene film  
 Microporous film  
 Polyvinyl chloride  
 Vinyl chloride monomer

**Specialty Chemicals Business Division**

Precipitated silica  
 Finely regulated silica  
 Fumed silica  
 Fused spherical silica  
 Basic magnesium carbonate  
 Calcium silicate  
 Plastic lens monomer  
 Photochromic dye materials  
 Scratch-resistant hard coating  
 Water-repellent coating solution  
 for plastic lenses  
 Chloranil  
 Chlorosulfonic acid  
 Benzenesulfonyl chloride  
 Bulk drug substance  
 Thenylchlor  
 Ion exchange membranes  
 Bipolar membranes  
 Seamless tubular membranes for cathodic  
 electrodeposition  
 Electro dialyzer  
 Diffusion dialyzer  
 Methylene chloride for electronics  
 industry use  
 Isopropyl alcohol for electronics  
 industry use  
 Sulfuric acid for electronics industry use  
 Developer for positive photoresists  
 IPA vapor drying system

IPA resistivity meter  
 IPA gas monitor  
 Solvent for metal cleaning (hydrocarbon,  
 aqueous, semi-aqueous)  
 High-purity perfluorinated inert liquid  
 Automatic chemical supply system

**Electronic Materials Business Division**

Polycrystalline silicon  
 Boron  
 High purity aluminum nitride powder  
 Translucent aluminum nitride ceramics  
 Machinable aluminum nitride ceramics  
 Gas sensitive semiconductors

**Medical Business Division**

Composite resins  
 Light cured dental adhesive and primer  
 Alginate impression materials  
 Dental stone  
 Dental investments  
 Glass ionomer cement  
 Dual cured adhesive resin cement  
 Denture relining materials  
 Quick self curing resin  
 Impression material for fitness test

Reagent for urine polyamine assay  
 Materials for reagent  
 Reagent for micro-titer test  
 Reagent for latex enhanced  
 immunoturbidimetry assay  
 Fully automated electrolyte assay system  
 Fully automated glucose assay system  
 Blood coagulation assay system  
 Multiple chemistry unit  
 Reagent for biochemistry assay  
 Specimen transportation system  
 Laboratory information system

---

**Tokuyama Corporation**

Shibuya Konno Bldg.  
3-1, Shibuya 3-chome, Shibuya-ku, Tokyo 150, Japan  
**Corporate Communications Department**  
TEL 03-3499-8023 FAX 03-3499-8966  
**International Department**  
TEL 03-3499-8937 FAX 03-3499-8967