

Integration of hydrazine hydrate business between Otsuka Chemical Co., Ltd. and Mitsubishi Gas Chemical Company, Inc.

January 9, 2004

Japan Fair Trade Commission

The Japan Fair Trade Commission (hereinafter referred to as “JFTC”) received a request from Otsuka Chemical Co., Ltd. (hereinafter referred to as “Otsuka Chemical”) and Mitsubishi Gas Chemical Company, Inc. (hereinafter referred to as “Mitsubishi Gas Chemical”) for prior consultation regarding the integration of the hydrazine hydrate (please see note) business contemplated by the two parties.

Upon review, The JFTC has responded to the parties that the integration is not likely to violate the provisions of the Antimonopoly Act based on the explanation given by the parties concerning the integration. (See Attachment for details.)

The case was reviewed in a detailed examination, and the results are hereby made public pursuant to the “Policies dealing with prior consultation regarding enterprise combination plans” (December 11, 2002).

(Note) Hydrazine, a basic inorganic compound with strong reducing properties, is a liquid at normal temperatures. It ordinarily circulates as hydrazine hydrate as it has a high affinity with water.

Hydrazine hydrate is used for blowing agents made of synthetic resins, deoxidants that treat circulating water for air-conditioning and boiler systems, metal reduction agents, and pharmaceutical and agrochemical intermediates, among others.

I. Outline of the integration

Otsuka Chemical and Mitsubishi Gas Chemical are contemplating an integration of the business by transferring their respective divisions in charge of production and distribution of hydrazine hydrate to an affiliate company of the parties before the end of 2004.

II. Views with respect to the Antimonopoly Act

1. Particular field of trade

The entire field of production and distribution of hydrazine hydrate was defined as the particular field of trade upon review from the users’ standpoint, such as whether or not the functions and uses, among others, were the same.

2. Evaluation with respect to the Antimonopoly Act

Imports are easily accessible given the importers' aggressive sales activities, and users, as a result, are in a position to switch suppliers including those dealing with imports at ease. Additionally, there is little concern over the likelihood of coordinated interactions among the parties and their competitors. Moreover, the measures proposed by the parties regarding transactions to be carried out with hydrazine hydrate distributors who currently compete with the parties, will have the effect of minimizing the adverse impact caused by a decrease in the number of competitors on the hydrazine hydrate sales market.

With respect to downstream markets, the integration, in the opinion of the JFTC, may not be to substantially restrain competition in these markets, provided that the measures to block information proposed by the parties will properly function.

3. Principal remedial measures proposed by the parties

- a. The parties shall not limit the quantities and suppliers for any sales transaction involving hydrazine hydrate to be concluded between any domestic hydrazine hydrate distributor, with whom the parties compete, and the integrated company.
- b. The price of hydrazine hydrate to be charged by the integrated company to the above-mentioned distributors shall be reasonably derived, based on the cost of goods manufactured.
- c. Necessary measures shall be implemented in an attempt to effectively block the flow of sales-related information between Otsuka Chemical and subsidiaries of Mitsubishi Gas Chemical which compete with each other in some downstream markets of hydrazine hydrate.

III. Conclusion

Based on the above, the JFTC has come to the conclusion that the integration may not substantially restrain competition in the field of trade involving hydrazine hydrate.

Integration of the hydrazine hydrate business between Otsuka Chemical Co., Ltd. and Mitsubishi Gas Chemical Company, Inc. (Responses)

I. Parties to the integration

Otsuka Chemical Co., Ltd. (hereinafter referred to as “Otsuka Chemical”) is in the business of sale and manufacture of chemical products, among others.

Mitsubishi Gas Chemical Company, Inc. (hereinafter referred to as “Mitsubishi Gas Chemical”) is in the business of sale and manufacture of inorganic and organic chemical products and petrochemical products, among others.

II. Outline of the integration and relevant provision

The parties plan to accomplish the integration by transferring the divisions in charge of the sale and manufacture of hydrazine hydrate to an affiliate company of one of the parties to be completed before the end of 2004.

The provision relevant to this integration is Section 16 of the Antimonopoly Act.

III. Purpose of the integration

In the face of a harsh business environment due to stagnant demand and the drop in prices of hydrazine hydrate, the parties intend to rationalize their business through integration.

IV. Particular field of trade

1. Outline of the products

Hydrazine, a basic inorganic compound with strong reducing properties, is a liquid at normal temperatures. It ordinarily circulates as hydrazine hydrate as it has a high affinity with water.

Hydrazine hydrate is used for blowing agents made of synthetic resins, deoxidants that treat circulating water for air-conditioning and boiler systems, metal reduction agents, and pharmaceutical and agrochemical intermediates, among others.

2. Particular field of trade

A review was conducted on the sale and manufacture of hydrazine hydrate, (the area where the parties compete), from the users’ standpoint, such as whether or not the functions and uses, among others, were the same. It revealed that no difference was observed in terms of quality and standards for different applications, that supplies were shipped to all users from the identical pool of inventories, that each user had the product

unloaded into the same storage tank regardless of the source of supplies, and that no difference was observed in terms of product and commercial distribution; hence, the entire field of the sale and manufacture of hydrazine hydrate was defined as the particular field of trade.

National market as a whole was defined as the geographical market.

V. Outline of examinations

1. State of the market

(1) Market shares, among others

Demand for hydrazine hydrate is on the decline, with oversupply becoming increasingly pronounced on a global basis. The domestic market of hydrazine hydrate for 2002 stood at about two billion yen.

As a result of the integration the combined share of the parties in terms of sales volume would be approximately 80%, ranking top in the market.

Rank	Maker	Share
1	Otsuka Chemical	Approx. 45%
2	Mitsubishi Gas Chemical (see note)	Approx. 35%
3	Company A	Approx. 10%
4	Company B	Approx. 5%
5	Company C	Approx. 5%
6	Company D	0 to 5%
(1)	Combined figure for the parties	Approx. 80%
	Total	100%

(Note) The share figure includes the market share of one of its subsidiaries (hereinafter referred to as “Company X”), which amounts to approximately 20% of the market.

(Source: compiled by the JFTC based on the data furnished by the parties)

(2) Competitors

a. Importers

Companies A, C, and D, which are leading chemical makers, import hydrazine hydrate. The three companies mentioned above have established local subsidiaries, which are engaged in sales activities either directly or through Japanese trading houses, among others. One of them has set up facilities in Japan where hydrazine hydrate is stored, filled and shipped.

b. Domestic competitors

Currently, domestic companies which are engaged in sales activities as makers are Company B and Company X, in addition to the parties. However, Company X is a subsidiary of Mitsubishi Gas Chemical, and depends on the OEM supply from its parent for the entire amount of hydrazine hydrate it transacts.

(3) State of the downstream markets

About 40% of hydrazine hydrate supplied in Japan is used for producing azodicarbonamide (AC). AC is a blowing agent, utilized for a wide range of applications for blowing rubber, plastic, and synthetic resins which are used in automobiles, construction materials, and home appliances, among others. In Japan, there are two companies engaging in producing and selling AC, namely Otsuka Chemical and Company Y(a subsidiary of Mitsubishi Gas Chemical). It should be noted in this connection that recently AC has been mass-produced inexpensively in other countries, primarily in China, as a new production technology enabling direct production of AC from basic chemical materials has been established.

There are a number of users who use hydrazine hydrate for other uses; however, a shift away from hydrazine hydrate and toward products made of materials other than hydrazine hydrate has been observed. This can be attributed in part to the PRTP regulation (see note), which is applicable to hydrazine hydrate.

It should also be noted that Otsuka Chemical and Company X, the subsidiary of Mitsubishi Gas Chemical, compete with each other in the sale and manufacture of hydrazine derivatives.

(Note) Pollutant Release Transfer Register: It is stipulated in the “Law concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in the Management,” (promulgated in July 1999). Chemical substances which are potentially hazardous to human health and to the ecological system are subject of the regulation in the law. The law requires businesses dealing with any of the substances covered by the Regulation to calculate and report to the government the volumes of releases of such chemicals to the environment and their transfers.

2. Factors taken into consideration

(1) Anticompetitive actions by the parties

In light of the following matters, the parties, in the opinion of the JFTC, are less likely

to unilaterally take anticompetitive actions in the field of the sale and manufacture of hydrazine hydrate.

a. Import and user's ease of switching suppliers

Based on the fact that imports account for about 15% of the merchandise circulated in the domestic sales market, combined with the fact that importers have established sales bases in Japan, it has been found that the volume of imports can be increased easily. Additionally, the ability of importers to supply necessary amounts is not likely to pose any problem, as they, given their production capacities, are ready to increase their production levels when demands would be recovered.

Furthermore, strong competitors, companies A, B, and C, which are involved in distribution and whose offerings are virtually identical in terms of quality, are present. For these reasons, it has been acknowledged that users can easily switch their supply sources from one supplier to another.

b. Ease of market entry

The production of hydrazine hydrate requires no special technology or facilities, and its physical distribution is not encumbered by any restrictions. For this reason, it has been observed that the market is poised to accept new entrants in the event of a demand recovery, although unlikely in the face of shrinking demand.

c. Bargaining power of users in price negotiation

Users of hydrazine hydrate place priority on prices, as the products offered by different suppliers are identical in terms of quality. For the purpose of slashing costs, users compare price quotations from more than one supplier. Sales prices have come down as a result. Therefore, it has been determined that users' bargaining power in price negotiation is strong.

d. Impact of competition on the downstream markets

Products made of hydrazine hydrate are exposed to competition with similar products made of materials other than hydrazine hydrate or made on processes requiring no hydrazine hydrate. Therefore, the users of hydrazine hydrate, in an effort to maintain their competitive advantage in connection with such products, have requested that the hydrazine hydrate manufacturers agree to lower their prices.

It has been determined that the hydrazine manufacturers, which need to secure sales volume, are forced to comply with such requests.

(2) Coordinated interactions by the parties and their competitors

The JFTC has determined that chances of coordinated interactions to be taken together by the parties and their competitors with respect to the sale and manufacture of hydrazine hydrate are less likely based on the following observations.

- a. It has been observed that importers are carrying out aggressive sales activities targeting users, including small-lot users.
- b. Domestic competitors set prices of their merchandise to meet those of imports, which are priced lower.

However, the sale and manufacture of AC and hydrazine derivatives in Japan is carried out virtually by Otsuka Chemical and a subsidiary of Mitsubishi Gas Chemical alone, and there is concern over the possibility of a coordinated interaction to be taken by the two.

VI. Remedial measures proposed by the parties

The parties have presented, the following proposals, in the course of the review, to counter the impact on competition in the field of hydrazine hydrate trade and on related downstream markets.

- a. The parties shall not limit the quantities and suppliers for any sales transactions involving hydrazine hydrate to be concluded between any domestic hydrazine hydrate distributor, with whom the parties presently compete, and the integrated company. The price of hydrazine hydrate to be charged by the integrated company to the above-mentioned distributors shall be reasonably derived, based on the cost of goods manufactured.
- b. With respect to the downstream markets, Otsuka Chemical and Company Y (which are horizontally competing in the field of AC sales), and Otsuka Chemical and Company X (which are horizontally competing in the field of hydrazine derivative sales), would be linked as a result of new equity relationships to be established between the new integrated company and Mitsubishi Gas Chemical. The parties will implement necessary measures in an attempt to effectively block the flow of sales-related information.

VII. Evaluation under the Antimonopoly Act

Aggressive sales efforts by importers make imports easily accessible by users, who are in a position to switch suppliers including importers. Additionally, there is little concern over the likelihood of coordinated interaction to be carried out by the competitors. Furthermore, the measures proposed by the parties concerning transactions between a domestic hydrazine hydrate distributors, with whom the parties compete, and the integrated company will have the

effect of minimizing the adverse impact caused by a decrease in the number of competitors on the hydrazine hydrate sales market.

Furthermore, the JFTC is of the opinion that, for the downstream markets, the integration may not substantially restrain competition in any of the markets, provided that the measures to block information flow proposed by the parties would function properly.

VIII. Conclusion

Based on the above observations, the JFTC has determined that the integration may not substantially restrain competition in the field of trade involving hydrazine hydrate sales and manufacturing, and thus it will not pose any problems with respect to the Antimonopoly Act.