UNITED STATES INTERNATIONAL TRADE COMMISSION

MELAMINE IN CRYSTAL FORM FROM JAPAN

Determination of Injury and Likelihood Thereof in Investigation No. AA1921-162 Under the Antidumping Act, 1921, as Amended, Together With the Information Obtained in the Investigation

USITC Publication 796
Washington, D. C.
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UNITED STATES INTERNATIONAL TRADE COMMISSION

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USITC FINDS INJURY IN MELAMINE CRYSTALS DUMPING CASE

The United States International Trade Commission has determined that a domestic industry is being injured and is likely to be injured by less-than-fair-value imports of melamine in crystal form from Japan. As a result of the determination, special dumping duties will be imposed by the Treasury Department. Sales at less than fair value are generally considered to be sales of items for export to the United States at prices less than of the articles in their home market.

Vice Chairman Joseph O. Parker and Commissioners George M. Moore and Catherine Bedell found that a U.S. industry is being injured and is likely to be injured by the "less than fair value" imports. Chairman Daniel Minchew and Commissioners Will E. Leonard and Italo H. Ablondi found that a U.S. industry is not being injured and is not likely to be injured by the "less than fair value" imports. Under section 201 of the Antidumping Act, a tie vote is considered to be a determination of injury.

On September 20, 1976, the USITC received advice from the Treasury Department that melamine in crystal form from

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Japan is being, or is likely to be sold at less than fair value. The Treasury investigation was limited to melamine crystals manufactured by Nissan Chemical Industries, Ltd., Tokyo, Japan, since virtually all imports of the subject melamine from Japan were produced by this manufacturer. Subsequently, the Commission instituted the investigation that resulted in today's determination.

Melamine is a fine white crystalline powder produced from urea and ammonia, both products of natural gas. It is used to manufacture amino resins which in turn have a wide variety of end uses, such as counter tops, paints, dinnerware, and adhesives.

There are three firms in the United States involved in the production of melamine. These firms supply melamine to more than 60 manufacturers of amino resins. The melamine industry directly employs about 230 workers. Major production centers are located in Louisiana and Ohio.

U.S. production of melamine in 1975 was about 85.9 million pounds. Imports during this period amounted to 6.3 million pounds, valued at about $1.8 million. The majority of imports of melamine come from Japan.

Copies of the Commission's report, Melamine in Crystal Form from Japan (USITC Publication 796), containing the views of the Commissioners and information developed during the course of investigation No. AA1921-162, may be obtained from the Office of the Secretary, United States International Trade Commission, 701 E Street NW., Washington, D.C. 20436.

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Note.—Information which would disclose confidential operations of individual concerns may not be published and therefore has been deleted from this report. Deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

[AA1921-162] December 20, 1976

MELAMINE IN CRYSTAL FORM FROM JAPAN

Determination

On September 20, 1976, the United States International Trade Commission received advice from the Department of the Treasury that melamine in crystal form from Japan, is being, or is likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, on October 6, 1976, the Commission instituted investigation No. AA1921-162 under section 201(a) of said act to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

Notice of the institution of the investigation and of a public hearing to be held in connection therewith was published in the Federal Register on October 14, 1976 (41 F.R. 45062). On November 9, 1976, a hearing was held in accordance with the notice at which all persons who requested the opportunity were permitted to appear by counsel or in person.

In arriving at its determination, the Commission gave due consideration to all written submissions from interested parties and information adduced at the hearing as well as information obtained by the Commission's staff from questionnaires, personal interviews, and other sources.

On the basis of the investigation, Vice Chairman Parker and Commissioners Moore and Bedell determined that an industry in the United States is being injured and is likely to be injured by reason of the importation of melamine in crystal form from Japan that is being, or is likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended. Chairman Minchew and Commissioners Leonard and Ablondi, on the other hand, determined that an industry in the United States is not being injured and is not likely to be injured by reason of the importation of melamine in crystal form from Japan that is being, or is likely to be sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended. 1/

1/ Vice Chairman Parker and Commissioners Moore and Bedell found in the affirmative, and Chairman Minchew and Commissioners Leonard and Ablondi found in the negative (see attached statements of reasons). Pursuant to section 201(a) of the Antidumping Act, 1921, as amended, the Commission is deemed to have made an affirmative determination if the Commissioners of the Commission voting are evenly divided as to whether its determination should be in the affirmative or in the negative.

Statement of Reasons for Affirmative Determination of
Vice Chairman Joseph O. Parker and Commissioners
George M. Moore and Catherine Bedell

In our opinion an industry in the United States is being injured and is likely to be injured by reason of the importation into the United States of melamine in crystal form (melamine) from Japan which, according to the finding of the Department of the Treasury (Treasury), is being, or is likely to be, sold at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended. Our reasons in support of this determination are set forth below.

The product

The imported product found to be sold at LTFV by Treasury is melamine from Japan. Although there are differing manufacturing processes by which melamine is produced and various raw materials used in its production, melamine, by and large, is a uniform end product.

The U.S. industry

In this determination we have considered the industry in the United States which is being injured and which is likely to be injured by reason of sales at LTFV to consist of the facilities devoted to the production of melamine. Three firms have produced melamine in the United States since 1973. These firms are Melamine Chemicals, Inc. (MCI), American Cyanamid Co., and Allied Chemical Corp. A major portion of the production

of American Cyanamid and Allied Chemical is retained for captive use. However, all of MCI's production is sold in the open market. It is significant that, in the domestic open market, in competition with the LTFV imports from Japan, MCI production represents 50 percent of domestic open-market sales.

LTFV sales

Treasury examined LTFV sales of melamine from Japan during July-December 1975. In that period one Japanese firm, Nissan Chemical Industries, Ltd. (Nissan), was found to have sold melamine in the United States. Fair-value comparisons were made on 99 percent of the melamine from Japan sold in the United States during the period of investigation, and 100 percent of the sales compared were found to be at LTFV prices. Margins, as calculated by Treasury, ranged from 50 to 70 percent, with a weighted average margin of 60 percent. The Commission's investigation disclosed that this large LTFV margin more than equaled the amount by which these imports undersold domestically produced melamine.

Market penetration by LTFV imports

Imports of melamine from Japan increased from 300,000 pounds (or 7.8 percent of total U.S. imports from all sources) in 1973 to 5.1 million pounds (or 80 percent of total U.S. imports from all sources) in 1975. Imports of melamine from Japan amounted to 1.7 million pounds in July-December 1974 but increased to 4 million pounds in July-December 1975. Moreover, these imports from Japan in July-December 1975 were all sold at LTFV.

The ratio of Japanese imports of melamine to U.S. consumption rose from less than 1 percent in 1973 to more than 6 percent in 1975--the year in which at least four-fifths of such imports were sold at LTFV. In July-December 1974, imports from Japan accounted for less than 3 percent of U.S. apparent consumption. That ratio nearly tripled in July-December 1975, the period when all import sales were made at LTFV prices.

The sales impact of Japanese melamine is directed to open-market consumption, which accounts for about half of total U.S. production. The remainder is captive production used by Allied Chemical and American Cyanamid. Thus, the ratio of LTFV imports to open-market consumption is substantially greater than the ratio of LTFV imports to total consumption. For example, the ratio of imports from Japan to U.S. open-market consumption increased from less than 5 percent in July-December 1974 to 15-20 percent during July-December 1975, when all such imports were sold in the United States at LTFV.

The 1975 surge in imports occurred at a time when U.S. production was 34 percent below the level of 1974 and U.S. consumption was 37 percent below its 1974 level. The rate at which the U.S. industry operated its melamine facilities declined from 77 percent of capacity in 1974 to 51 percent of capacity in 1975. Thus, the increase in LTFV imports clearly were more injurious because the U.S. industry was already suffering from the economic recession in 1975.

Under the law, injury or likelihood of injury must have occurred "by reason of the importation of" LTFV merchandise into the United

States. However, it is not necessary that importation of LTFV merchandise be a principal cause, a major cause, or a substantial cause of injury to an industry. 1/ Even where several factors that may cause injury, other than LTFV sales, are present, all that is required for an affirmative determination is that the LTFV merchandise contributed to more than an inconsequential injury. 2/ It is clear from the following indicators of injury that more than inconsequential injury was suffered by the U.S. melamine-producing industry by reason of sales and increased penetration of Japanese melamine in the United States at LTFV prices.

Price depression resulting from LTFV imports

Imports of Japanese melamine were priced substantially higher than domestically produced melamine during most of 1974, were priced about the same as domestically produced melamine during the first few months of 1975, and were priced substantially lower than domestically produced melamine during the remainder of 1975 (including all of the LTFV period) and the early part of 1976. The underselling during the period of LTFV sales was equivalent to as much as 7.5 cents per pound, or 22 percent below the U.S. producers' prices in some instances. This underselling contributed to reductions of about 6 percent in U.S. producers' prices,

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1/ U.S. Senate, Trade Reform Act of 1974; Report of the Committee on Finance. . ., S. Rept. No. 93-1298, (93d Cong., 2d sess.), 1974, p. 180.

2/ Elemental Sulfur from Mexico, Determination . . . in Investigation No. AA1921-92 . . ., TC Publication 484, 1972 (statement of reasons for affirmative determination of Chairman Bedell and Commissioners Sutton and Moore, at p. 3); Bicycle Speedometers from Japan, Determination . . . in Investigation No. AA1921-98 . . ., TC Publication 513, 1972 (statement of reasons for affirmative determination of Chairman Bedell, Vice Chairman Parker, and Commissioners Leonard and Moore, at p. 7). See also Water-Circulating Pumps, Wet-Motor Type, From the United Kingdom, Determination . . ., in Investigation No. AA1921-152 . . ., USITC Publication 777, 1976 (statement of reasons of Chairman Will E. Leonard, at pp. 10-11).

beginning early in 1975 and continuing throughout the year. During the period of LTFV imports, the LTFV margin was greater in all instances than the margin of underselling. The underselling by the LTFV imports contributed to the price depression in the domestic market.

Sales lost to LTFV imports

Substantial evidence was obtained by the Commission that domestic sales which would have been made by all three U.S. producers of melamine (MCI, Allied, and American Cyanamid) were lost to LTFV imports of melamine from Japan. Many purchasers that had formerly obtained little or none of their melamine requirements from Japan suppliers bought substantial quantities of LTFV Japanese melamine during July-December 1975. In fact, two of the largest U.S. users of melamine first began to use Japan melamine in 1975; neither firm had used foreign melamine prior to that time. More than 70 percent of U.S. imports of LTFV melamine from Japan during July-December 1975 were sold to these two customers.

Prior to 1975, when U.S. suppliers at times could not fulfill domestic demand for melamine, Japanese melamine was sold in the United States at prices substantially higher than U.S.-produced melamine. However, during 1975, especially during the latter half of the year, and during early 1976, U.S. producers were capable of supplying virtually all of U.S. requirements of melamine. LTFV sales of Japanese melamine resulted in lost sales for U.S. producers solely because of LTFV pricing that allowed Japanese melamine to undersell the domestic product. All

the U.S. purchasers that commented on this question stated that in the U.S. market the price of melamine is the controlling factor in making purchases.

Decline in employment resulting from LTFV imports

The employment of U.S. production and related workers producing melamine declined by 38 percent from 1974 to 1975 (or from 331 workers to 204 workers). During July-December 1974, such employment amounted to 238 workers but declined to 207 workers during July-December 1975, the period of LTFV sales. While part of the decline is probably due to such causes as the recession, the presence of LTFV imports certainly contributed to increased unemployment in the U.S. melamine industry.

Profit and loss effects of LTFV imports

Between 1974 and 1975 the ratio of net operating profits (before taxes) to net sales for the three U.S. producers of melamine declined by 28 percent. The decline in the ratio of net operating profits to net sales between July-December 1974 and the corresponding period in 1975 (when all Japanese imports were being sold at LTFV) was even more substantial--67 percent.

Of greater significance, however, is the effect of LTFV imports on the U.S. industry measured by the ratio of industry profitability to capital investment. The melamine industry is extremely capital intensive. When profitability is evaluated in terms of return on capital investment rather than return on sales, the profitability was low. Obviously, U.S.

industry profitability, by whatever measure, was impaired by LTFV imports which resulted in reduced U.S. sales and depressed prices for U.S. producers.

Likelihood of injury from LTFV sales

The Japanese industry has the capacity to almost double its 1975 production of melamine. The ability and willingness of the Japanese industry to penetrate the U.S. market by selling melamine at LTFV prices (with margins ranging up to 70 percent as calculated by Treasury) has been clearly demonstrated. Unless effective action is taken to prevent the continuation of such unfair practices the injury found to have been suffered by the domestic industry will intensify.

Conclusion

We have determined that an industry in the United States is being injured and is likely to be injured by reason of the importation of melamine from Japan found by Treasury to be, or likely to be, sold at LTFV.

Statement of Reasons for Negative Determination of
Chairman Daniel Minchew and Commissioners Will E. Leonard and
Italo H. Ablondi

On the basis of the reasons cited below, we have determined that an industry in the United States is not being injured and is not likely to be injured 1/ by reason of the importation of melamine crystals (hereinafter referred to as melamine) from Japan which the Department of the Treasury (Treasury) has found are being, or are likely to be, sold at less than fair value (LTFV).

The LTFV determination by Treasury is based upon an examination of 99 percent of exports of such melamine from Japan to the United States during the period July 1, 1975, to December 31, 1975. Dumping margins ranged from 50 to 70 percent, according to the advice the Commission received from Treasury. All the imported melamine found to be sold at LTFV prices during July-December 1975 was manufactured by Nissan Chemical Industries, Inc. (Nissan), one of three Japanese producers of melamine.

U.S. industry

Melamine, the imported article under investigation, is a fine white crystalline powder produced from urea and ammonia, both products of natural gas. Melamine is used to manufacture amino (melamine-formaldehyde) resins. These resins are in turn used in the following specific classes of products: High-pressure laminates used extensively in the

1/ Prevention of establishment of an industry is not an issue in the instant case and will not be discussed further.

construction industry (i.e., kitchen and bathroom counter tops); molding compounds (e.g., dinnerware); surface-coating resins (e.g., automotive topcoats); textile treating resins used primarily to impart wrinkle resistance to cotton; and paper treating resins used primarily to provide wet strength to paper towels.

The U.S. industry most likely to be impacted by the LTFV imports in question consists of domestic facilities devoted to the production of melamine. This is the only industry with respect to which evidence regarding alleged injury was presented to the Commission in this investigation.

Melamine is currently manufactured by the American Cyanamid Co. (American Cyanamid), the Allied Chemical Corp. (Allied), and the complainant before Treasury, Melamine Chemicals, Inc. (MCI). American Cyanamid and Allied retain a significant portion of their production for captive use. The remainder is sold in the U.S. merchant market and in export sales. MCI sells exclusively to the U.S. merchant market and the export market.

No injury by reason of LTFV imports

In this investigation, evidence of alleged injury to the domestic industry tended to focus on the year 1975. After careful examination of the evidence, we have concluded that any injury which the domestic industry did incur in 1975 and previous years was not by reason of LTFV sales. Such sales are not an identifiable cause of any such injury; rather, the recession in the markets for end products using melamine accounts for any such injury.

The decline in domestic production of melamine in 1975 is attributable to depressed conditions in the end-use markets for melamine and not to LTFV imports. U.S. melamine production fell by 34.3 percent between 1974 and 1975; however, most of this decrease occurred in the first 6 months of 1975, before the period of the Treasury investigation. Domestic production increased during the 6 months of 1975 (the period of Treasury-determined LTFV sales) by 97 percent over what it was in the first 6 months of 1975. Production slipped by less than 9 percent between the last 6 months of 1975 and the corresponding period in 1974.

Sharply reduced demand in two key sectors of the economy, the construction and automobile industries, led to production cutbacks in melamine in early 1975. The construction and automobile industries, which constitute over 50 percent of the end-use markets for melamine, were severely affected by recessionary influences in 1974 and 1975. Expenditures for new housing units declined more than 20 percent between 1973 and 1974, and 16 percent between 1974 and 1975. In 1975, private housing starts amounted to less than half the 1972 level. In the automobile industry, sales fell 24 percent in 1974 from the previous year's level. Sales again dropped in 1975, giving the automobile business its poorest sales record in many years.

The decline in employment at U.S. melamine facilities in 1975 was not related to LTFV imports, but rather to depressed economic conditions and a strike at American Cyanamid's Fortier plant. Although the number of domestic workers engaged in melamine production dropped in 1975 from what it was in 1974, the reduction in employment occurred principally

in the first 6 months of 1975. The number of production workers at melamine facilities which did not experience strikes in 1975 remained constant or increased during the second 6 months of 1975, compared with the corresponding period in 1974. The total number of man-hours expended in the domestic production of melamine during the period in which Treasury found there to be LTFV sales (280,000 hours) was almost identical to the number of man-hours worked during the last 6 months of 1974 (281,000 hours). LTFV import sales thus had virtually no impact on domestic employment.

Melamine prices fell in 1975 because of oversupply and reduced demand in the construction and automobile industries. In 1974, shortages of melamine caused by a tight supply of urea (a primary raw material in melamine manufacture) resulted in a sharply upward trend in prices for melamine, which was reversed in 1975 as urea became more available and the supply of melamine correspondingly increased. Substantial decreases in U.S. producers' melamine prices occurred in the first quarter of 1975, before known LTFV sales. In the first 3 months of 1975, melamine imports from Japan totaled only 330,000 pounds, and were priced above prevailing domestic prices. LTFV sales cannot be considered to have had an impact upon the substantial decreases in prices made by domestic producers in the early months of 1975.

Although U.S. imports from Japan increased substantially in 1975, the increase only reflects the increased availability of melamine worldwide after the acute shortages of melamine in 1973 and 1974. The

ratio of U.S. imports from Japan to consumption in 1975 was lower than the corresponding ratio in 1971.

Although net operating profits of U.S. melamine producers decreased between 1974 and 1975, the decline can be attributed to recessionary conditions in the economy rather than to LTFV sales. A comparison of the net profits before income taxes for producers of melamine with the pre-tax net profits for all manufacturers of industrial chemical synthetics revealed a downward trend for both groups over the period 1973-75; melamine producers, however, showed much higher profits. The profit-to-sales ratio for the melamine industry in 1975 was 24 percent; for all manufacturers of industrial chemicals and synthetics, the ratio was 11 percent. LTFV sales thus did not have an identifiable effect on the profitability of U.S. melamine manufacturers.

Although two U.S. melamine producers claim loss of sales because of LTFV imports from Japan, the issue is not clear cut. A large purchaser of Nissan melamine in 1975 developed credit problems with a domestic producer at the end of 1974. As a result of this credit dispute, the purchaser sought other suppliers, both domestic and foreign. Other companies that purchased Nissan melamine did not substantially reduce purchases from domestic sources between 1974 and 1975.

In addition, the U.S. industry has apparently had little trouble competing in export markets in view of the fact that U.S. exports have increased each year since 1971, and U.S. exports during the first 9 months of 1976 were greater than U.S. exports during all of 1975.

During July-December 1975, the LTFV period, U.S. exports were nearly three times as much as during the corresponding period of 1974.

No likelihood of injury by reason of LTFV imports

Although Nissan has recently installed a new melamine production facility with enlarged capacity, there is no substantial evidence that Nissan's exports to the United States will increase as a result. In 1977 and future years, Nissan will be required to supply a greater share of melamine demand within Japan. Of the two other manufacturers of melamine in Japan, one company (Nippon Carbide) announced an indefinite cessation of melamine production, and the other company (Mitsui-Toatsu) has an unstable production schedule which necessitates that it purchase some of its melamine needs from Nissan. Because of the increased demand within Japan and its present export commitments, Nissan has stated that it will be unable to supply melamine to new customers overseas. These factors make it unlikely that Nissan will enlarge its market in the United States. In addition, Nissan has indicated that it will, in the future, sell melamine in the U.S. market at fair value.

Both the Japanese and U.S. melamine industries had substantial over-capacity in 1975. However, the current economic recovery, particularly in the construction industry, which is underway in both Japan and the United States, will result in greater utilization of melamine productive capacity in both countries in 1976 and 1977. The domestic melamine industry is performing well in 1976, with domestic producers strongly rebounding from the economic reccession. U.S. demand for melamine

increased substantially in 1976, with melamine production in the first 6 months of 1976 up almost 138 percent from the level in the corresponding period in 1975. The recovery in the end-use markets for melamine indicates a favorable outlook for domestic production.

Conclusion

All this information leads to the conclusion that an industry in the United States is not being injured and is not likely to be injured by reason of LTFV imports of melamine from Japan.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On September 20, 1976, the United States International Trade Commission received advice from the Department of the Treasury that melamine in crystal form from Japan is being, or is likely to be, sold in the United States at less than fair value within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, on October 6, 1976, the Commission instituted investigation No. AA1921-162 under section 201(a) of said act to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such melamine into the United States. By statute the Commission must render its determination within 3 months of its receipt of advice from Treasury—in this case by Monday, December 20, 1976.

In connection with the investigation, the Commission conducted a public hearing on November 9, 1976. Notice of the institution of the investigation and of the hearing was duly given by posting copies thereof at the office of the Secretary, United States International Trade Commission, Washington, D.C., and at the Commission's New York office, and by publishing the notice in the Federal Register of October 14, 1976 (41 F.R. 45062).

Following the receipt of a complaint from Melamine Chemicals, Inc. (MCI), Treasury instituted an antidumping investigation by publication

of an Antidumping Proceeding Notice in the Federal Register on December 19, 1975 (40 F.R. 58869). The investigation was limited to melamine crystals manufactured by Nissan Chemical Industries, Ltd., Tokyo, Japan, since virtually all imports of the subject melamine from Japan were produced by this manufacturer. On June 18, 1976, a Withholding of Appraisement Notice was published in the Federal Register (41 F.R. 24731). Treasury's determination of sales at less than fair value was made on September 17, 1976, and was published in the Federal Register on September 23, 1976 (41 F.R. 41727).

The Product

Description

Melamine is a fine white crystalline powder. All melamine crystals (hereinafter referred to as melamine) manufactured in the United States are produced by mixing urea and ammonia in the presence of heat and pressure. The vast majority of foreign-produced melamine (including all Japanese melamine) is also manufactured from ammonia and urea. Some foreign melamine is still produced by the use of dicyandiamide--a process formerly used in this country and eventually discontinued because of the improved economics of the process that uses urea and ammonia.

Uses

The bulk of all melamine consumed in the United States is used to manufacture amino resins (i.e., melamine-formaldehyde resins). The amino resins include high-pressure laminating resins, molding compounds, surface-coating resins, textile-treating resins, and paper-treating resins, as shown in table 1.

Table 1.—Melamine: U.S. consumption, by end uses, 1971-75

(In thousands of pounds)

Year	High-pressure laminating resins	Molding compounds	Surface-coating resins	Textile-treating resins	Paper-treating resins	All other uses (including adhesives)	Total
1971--	***	***	***	***	***	***	***
1972--	***	***	***	***	***	***	***
1973--	***	***	***	***	***	***	***
1974--	***	***	***	***	***	***	***
1975--	***	***	***	***	***	***	***

Source: Chemical Economics Handbook, Stanford Research Institute; official statistics of the U.S. Department of Commerce; and responses by U.S. producers to U.S. International Trade Commission questionnaires.

The largest single use of melamine is in the manufacture of high-pressure laminating resins, accounting for 30 percent of U.S. consumption in 1975. High-pressure laminates are used as surface layers when a combination of decorative effect and durability (e.g., heat, abrasion, and stain resistance) are desired. Typical high-pressure laminate products are kitchen and bathroom counter tops, cabinets, doors, table tops, and partitions in commercial buildings. Although acrylic, diallyl phthalate, and unsaturated polyester resins, and polyvinyl chloride impregnated fabric offer some competition to high-pressure laminates, melamine resin is superior in providing the best combination of appearance and durability. The principal user of melamine for the production of high-pressure laminates is American Cyanamid's subsidiary, Formica Corp.

Molding compounds comprise the next largest use of melamine, accounting for 22 percent of U.S. consumption in 1975. More than 90 percent of all molding compounds are consumed in the production of dinnerware. Other products manufactured with molding compounds include ash trays, automobile distributor caps, buttons, school furniture, and toilet seats. The principal manufacturers of molding compounds are American Cyanamid Co. and Plastics Manufacturing Co.

A third use of melamine, which accounted for 20 percent of U.S. melamine consumption in 1975, is in the manufacture of surface-coating resins. This application has increased steadily during the last 15 years. In the near future probably more melamine will be

used in the manufacture of surface-coating resins than in the production of molding compounds. Surface-coating resins differ from high-pressure laminates and molding compounds in that the melamine-formaldehyde resins are further treated with additional chemicals. The resultant product is soluble in organic solvents. Principal uses for surface-coating resins are in appliance finishes, automotive topcoats, and metal furniture finishes. Surface-coating resins are also used in intumescent paints, which are used for fire protection. In the presence of intense heat, intumescent paint forms a solid foam which protects the surface to which it has been applied. American Cyanamid and Monsanto Co. manufacture the bulk of U.S.-made surface-coating resins.

The manufacture of textile-treating resins, paper-treating resins, and adhesives, and other miscellaneous uses accounted for approximately 28 percent of U.S. melamine consumption in 1975. Textile-treating resins are used primarily to impart wrinkle resistance to cotton fabrics and to give body to some synthetic fabrics. Paper-treating resins are used primarily to provide wet strength to paper. The bulk of melamine-based adhesives are used in the manufacture of plywood. Leather-tanning agents, ion-exchange resins for water treatment, and gypsum plaster are some of the other types of articles that are made from melamine. American Cyanamid Co., Sun Chemical Corp., and Monsanto Co. are the principal manufacturers of textile-treating resins. The major users of melamine for the production of paper-treating resins are American Cyanamid, Monsanto, and Reichhold Chemicals, Inc.

U.S. tariff treatment

Melamine is dutiable under TSUS item 425.10. The column 1 (most-favored-nation) rate of duty is 5 percent ad valorem; the column 2 rate is 25 percent ad valorem. There is no duty applied to imports under item 425.10 from GSP beneficiary countries. The column 1 rate, which has been in effect since January 1, 1972, is the result of the last of five staged reductions negotiated under the Kennedy Round of trade negotiations pursuant to the General Agreement on Tariffs and Trade. Prior to January 1, 1968, the column 1 rate of duty had been 10.5 percent ad valorem.

Nature and Extent of Sales at Less Than Fair Value

Treasury's investigation of U.S. imports of melamine from Japan covered the 6 months extending from July 1 to December 31, 1975. Fair-value comparisons were made on 99 percent of the melamine from Japan sold to the United States during the period of investigation, and 100 percent of the sales compared were at less than fair value (LTFV). Margins of sales at LTFV ranged from 50 to 70 percent, with a weighted average margin of 60 percent. Treasury determined the aggregate value of margins of sales at LTFV during the period to be approximately * * *, none of which is collectable because Treasury did not withhold appraisement until June 18, 1976. Virtually all imports of melamine from Japan were manufactured by one company, Nissan Chemical Industries, Ltd. (Nissan), of Tokyo. Treasury limited its investigation to this one manufacturer.

The Treasury Department computes margins on LTFV sales on a purchase-price basis, while the U.S. International Trade Commission uses the home-market price as the base. 1/ Based on the ITC formula, margins on melamine from Japan would range from 34 to 41 percent.

1/ Percentage dumping margins are calculated as follows:

Department of Treasury formula: $\frac{\text{Margin}}{\text{Purchase price (or exporter's sales price)}}$

ITC formula: $\frac{\text{Margin}}{\text{Home-market price (or fair value)}}$

In determining dumping margins, Treasury calculated the fair value, or home-market price, on the basis of the delivered net packed price to the distributor. Adjustments were made for inland freight, rebates, credit, and packing expenses. Treasury allowed a claim from Nissan for deductions based on warehousing costs incurred at a purchaser's request. Other deductions claimed by Nissan, such as research and development, travel, and entertainment expenses, were denied since those costs did not directly pertain to the sales under consideration.

Since all export sales were made to Japanese trading companies, which sold exclusively to their wholly owned U.S. subsidiaries, the purchase price (or exporter's sales price) was calculated on the basis of the f.o.b. price to the trading companies. Allowances were made for inland freight, shipping charges, interest, and palletization.

According to Treasury, imports of melamine from Japan were valued at approximately $1.4 million during 1975. In this same period, Nissan accounted for at least * * * percent of U.S. melamine imports from Japan. Melamine also has been or is being produced in Japan by two other firms, Mitsui Toatsu and Nippon Carbide; both of these companies have exported melamine to the United States in recent years, but not during the period of LTFV sales.

The Domestic Industry

Summary

Melamine is manufactured in the United States by American Cyanamid Co. and Allied Chemical Corp. (Allied), both large horizontally diversified and vertically integrated chemical companies, and by a third company, Melamine Chemicals, Inc. (MCI), which is a joint venture of First Mississippi Corp. and Ashland Oil Co. (a large horizontally diversified petroleum and chemical company). These three producers supply more than 60 manufacturers of melamine-formaldehyde resins. A fourth company, Premier Petrochemical Co. (Premier), of Pasadena, Tex., ceased the manufacture of melamine in early 1973 because of severe technical and economic problems with its melamine plant. MCI is the complainant in this investigation.

The companies, their headquarters, plant locations, and capacities are listed in the following table:

Table 2.—U.S. melamine producers: Plant locations and annual capacities, 1976

Company	Headquarters	Melamine plant	Estimated capacity	Share of total U.S. capacity
			Million pounds	Percent
Melamine Chemicals, Inc.	Columbus, Ohio	Donaldsonville, La.	70	41
American Cyanamid Co.	Wayne, N.J.	Fortier, La.	70	41
Allied Chemical Corp.	Morristown, N.J.	South Point, Ohio	30	18

Source: Compiled from data submitted by U.S. producers in response to questionnaires of the U.S. International Trade Commission.

U.S. producers

MCI has produced melamine since 1971 at Donaldsonville, La. MCI uses the technology of NV Nederlandse Staatsmijnen--Dutch States Mines (DSM). Although the MCI plant was designed by DSM to produce 70 million pounds of melamine per year, MCI has only recently operated the plant at full capacity. MCI asserts that it did not know at the time of the license agreement that the DSM-designed plant would not perform according to design specifications. The plant had a substantial amount of downtime during the first few years of operation. In addition, the melamine produced was frequently contaminated with material used in the production process (e.g., catalyst, filter aid, and so forth). Virtually every portion of the plant required modification; some sections even required complete redesign. MCI filed a lawsuit for $80 million ($40 million for actual damages and $40 million in exemplary damages) against DSM. The matter is currently awaiting adjudication.

MCI purchases urea and ammonia from Triad Chemical Co., a joint venture of First Mississippi Corp. and Mississippi Chemical Co. * * * . Melamine for bulk shipment in hopper cars is not ground, since the crystals tend to adhere to one another and the smaller particle size would make it virtually impossible to unload the hopper car.

MCI produced * * * pounds of melamine in 1975, none of which was retained for captive use. Exports in 1975 were approximately * * * pounds.

American Cyanamid operates a 70-million-pound-per-year DSM-designed plant for its melamine production. It produces its own urea and ammonia. Its plant began production in 1971, shortly after the MCI plant began operating. American Cyanamid experienced startup problems with its plant similar to those experienced by MCI; the two plants were virtually identical. However, the inability to produce melamine at capacity was not a problem for American Cyanamid, since it was prohibited from producing more than 30 million pounds per year by a consent order issued in the United States District Court for the Southern District of New York. In 1973 the order was modified to allow American Cyanamid to produce 44 million pounds of melamine. In 1974 it was amended again to allow the production of 50 million pounds of melamine during January-October 1974. Since October 1974, there has been no legal limitation of American Cyanamid's production of melamine.

In April 1975, production workers at American Cyanamid's Fortier, La., plant, which produces melamine, went on strike. The strike has not yet been resolved, and the plant was operated by supervisory personnel until recently, when new production workers were hired.

American Cyanamid produced * * * pounds of melamine in 1975. At least * * * pounds of this production was retained for captive use. American Cyanamid's melamine exports were approximately * * * pounds.

Allied has produced melamine at South Point, Ohio, since 1963. * * *.

In 1975 Allied produced * * * pounds of melamine, * * * percent of which was retained for captive use. The remainder was sold to other domestic producers of melamine-formaldehyde resins. Since 1971, Allied's exports of melamine have been * * *.

Premier began production in 1971 with a 30-million-pound-per-year, DSM-designed plant. It experienced the same technical difficulties as MCI and American Cyanamid had. Furthermore, according to industry sources, the operating costs of a 30-million-pound-per-year plant proved to be virtually identical with those of a 70-million-pound-per-year plant. Consequently, in early 1973, when it became more profitable for Premier to divert its urea supply to the fertilizer market, production of melamine ceased.

Channels of distribution

Captive use of melamine by its producers accounts for about a half of annual U.S. production. Of the remaining half, most is sold directly from the producer to the user. Indirect sales of melamine to melamine users by any of the three domestic producers are thought to be negligible. In 1976, however, Pioneer Plastics, of Auburn, Maine, a major user of melamine (* * * pounds in 1975), purchased * * * pounds of melamine through a broker. * * * .

During late 1974 and early 1975 there were a number of instances of resales from one user firm to another. The resales helped liquidate large inventories built up by users during a 1973-74 melamine shortage. The material sold was generally priced below the then current market value in an attempt to achieve immediate sales. These resales virtually ceased by mid-1975, when LTFV sales of Japanese melamine commenced. Resales have been virtually nonexistent since that time.

Consideration of Injury or Likelihood Thereof

General economic conditions

Demand for melamine is dependent upon consumer activity in key sectors of the economy, in particular the construction, automotive, and textile industries. Recessionary influences in 1974 and 1975 severely depressed most of the major end-use markets for melamine.

The largest market for melamine--high-pressure laminating resins used in kitchen counter tops and wall surfaces--is highly sensitive to fluctuations in the construction industry. Because of the general economic setback and high mortgage rates in 1975, the conventional home-building business in 1975 sank to its lowest rate of activity in 30 years. Private housing starts in 1975 fell to less than half of the peak of 2.4 million units in 1972. As the following table indicates, expenditures for new housing units were off 22 percent from 1973 to 1974 and 16 percent from 1974 to 1975. For the period January-September 1976, housing starts were 25 percent above the 1975 level.

Table 3.—U.S. expenditures on new construction, by types of construction, 1970-75

(In billions of dollars)

Item	1970	1971	1972	1973	1974	1975
Private construction	66.8	80.1	93.9	103.4	97.1	90.0
Residential building	31.9	43.3	54.3	57.6	47.0	43.0
New housing units	24.3	35.1	44.9	47.9	37.3	31.3
Total	123.0	158.5	193.1	208.9	181.4	164.3

Source: Standard and Poor's Industry Surveys, Building Industry.

As a surface-coating resin, melamine is purchased by the automotive industry for paint finishes. Like the construction industry, the automobile business made its poorest showing in many years in 1975. Factory sales of passenger cars totaled 7.3 million units in 1974, down 24 percent from 1973. In 1975, sales declined an additional 8 percent from the 1974 figure. During the first three quarters of 1976, however, automotive sales were 20 percent higher than they had been during the corresponding period of 1975.

In the textile industry, melamine for use as a textile-treating resin for cotton was subject to production cutbacks in 1974 and 1975. In addition, the textile market for melamine has been eroded by the increased popularity of synthetic fibers.

Before the economic decline of 1974 and 1975, melamine was in tight supply worldwide. The high prices obtainable in foreign agricultural markets for urea (a primary material in both fertilizer and melamine manufacture) diverted urea from melamine manufacture and effectively reduced the supply of melamine, thus contributing to rising prices for melamine from 1971 through 1974.

In 1975 the situation changed as urea became more readily available. The increased availability was a result of several factors: new urea plants starting production, drought conditions decreasing the demand for fertilizer, and reduced purchases of fertilizer by farmers because of high prices. With the increased availability of urea, the supply of melamine increased substantially. These factors, along with the depressed demand in the construction and automobile industries in 1975, led to the suspension of melamine production for several

months by both American Cyanamid and MCI. At the present time melamine is in ample supply, and industry representatives expect it to remain so through the rest of this decade.

U.S. production and domestic sales of melamine

U.S. production and domestic sales of melamine are listed in table 4. Although there may be some buildup of inventory at yearend, the difference between quantity of melamine produced and quantity of melamine sold is due primarily to the captive use of melamine, except for MCI, which has no captive use. If production continues in 1976 at the current rate, it will exceed 137 million pounds for the year, a quantity which exceeds by 7 million pounds the largest annual quantity ever produced in the United States (130.7 million pounds in 1974). Assuming that the January-September rate of domestic sales (in pounds) continues through December 1976, total domestic sales (in pounds) for the year will exceed those in all earlier years but 1972.

U.S. exports

U.S. exports of melamine have increased annually since 1971 and during the early part of 1976 represented * * * percent of the quantity of U.S. production. Export sales of melamine by U.S. producers are detailed in table 5.

* * * * * * *

Table 4.--Melamine: U.S. production and domestic sales, by producers, 1971-75, July-December 1974, July-December 1975, and January-September 1976

Period and producer	Production	Sales		
		Quantity	Value	Unit value
	1,000 pounds	1,000 pounds	1,000 dollars	Per pound
1971, total	66,078	53,807	8,832	$0.164
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
Premier	***	***	***	***
1972, total	116,026	82,392	13,139	.159
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
Premier	***	***	***	***
1973, total	118,720	79,308	14,862	.187
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
Premier	***	***	***	***
1974, total	130,672	73,132	21,540	.295
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
1975, total	85,894	48,273	16,186	.335
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
July-Dec. 1974, total	62,381	36,321	12,373	.341
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
July-Dec. 1975, total	56,925	26,467	8,757	.331
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***
Jan.-Sept. 1976, total	103,318	55,447	18,599	.335
Allied	***	***	***	***
American Cyanamid	***	***	***	***
MCI	***	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission by domestic producers of melamine.

Table 5.--Melamine: U.S. export sales, by producers, 1971-75, July-December 1974, July-December 1975, and January-September 1976 1/

Period and producers	Quantity	Value	Unit value
	1,000 pounds	1,000 dollars	Per pound

* * * * * * *

Table 5.--Melamine: U.S. export sales, by producers, 1971-75, July-December 1974, July-December 1975, and January-September 1976 1/--Continued

Period and producer	Quantity	Value	Unit value
	1,000 pounds	1,000 dollars	Per pound

* * * * * * *

1/ * * * * .

Source: Compiled from data submitted in response to U.S. International Trade Commission questionnaires.

The expiration of American Cyanamid's production limitation, the decreased demand for melamine in the United States, and the correction of the majority of the design defects in the DSM-designed plants are all factors that have created an oversupply of melamine in the United States and have resulted in * * * greater export activity.

The future of the export market for U.S.-made melamine does not appear to be promising, since there currently exists a substantial worldwide overcapacity for melamine production. Moreover, further expansion of European facilities to produce melamine is currently underway. Industry sources project an increase in the worldwide annual melamine production capacity of 395 million pounds, or 49 percent over the current capacity.

* * * * * * *

U.S. imports

U.S. imports of melamine in 1971 totaled 29.3 million pounds, of which Japan accounted for 7.8 million pounds (table 6), or 27 percent. Total imports thereafter declined to a low of 3.9 million pounds in 1973, but increased to 6.3 million pounds in 1975, with Japan accounting for about 80 percent of the total. Other major suppliers of U.S. imports of melamine in recent years have been Austria, Italy, and the Netherlands. During January-September 1976, Japan accounted for 87 percent of total U.S. imports of melamine.

Table 6.—Melamine: U.S. imports for consumption, total and from Japan, 1971-75, July-December 1974, July-December 1975, and January-September 1976

Year	Total U.S. imoprts	Imports from Japan	
		Quantity	Percent of total U.S. imports 1/
	Million pounds	Million pounds	
1971	29.3	7.8	26.7
1972	11.7	5.7	48.6
1973	3.9	.3	7.8
1974	4.2	2.8	65.9
1975	6.3	5.1	79.8
July-December--			
1974	2.4	1.7	73.4
1975	4.7	4.0	85.1
January-September 1976	2.1	2/ 1.8	87.0

1/ Percentages calculated from unrounded figures.
2/ No imports have been received from Japan since March 1976.

Source: Official statistics of the U.S. Department of Commerce.

U.S. consumption

Apparent U.S. consumption of melamine increased from * * * pounds in 1971 to * * * pounds in 1972, declined to * * * pounds in 1973, increased to * * * pounds in 1974, and declined sharply to * * * pounds in 1975 (see table 7). Available evidence indicates that U.S. apparent consumption should be significantly greater in 1976 than it was in 1975. A detailed discussion of U.S. consumption of melamine by end-use categories is presented on pages A-3 through A-6, and is shown in tabular form in table 1.

Table 7.--Melamine: U.S. production, exports of domestic merchandise, imports for consumption, and apparent U.S. consumption, 1971-75, July-December 1974, July-December 1975, and January-September 1976

(Quantity in thousands of pounds; value in thousands of dollars)

Period	Production	Exports	Imports	Apparent consumption	Ratio of imports to consumption (percent)
	Quantity				
1971	65,997	***	29,279	***	***
1972	116,026	***	11,656	***	***
1973	118,720	***	3,859	***	***
1974	130,672	***	4,173	***	***
1975	85,894	***	6,346	***	***
July-December:					
1974	62,381	***	2,373	***	***
1975	56,925	***	4,701	***	***
January-September					
1976	103,318	***	2,060	***	***
	Value 1/				
1971	10,984	***	4,946	***	***
1972	18,448	***	2,037	***	***
1973	22,201	***	681	***	***
1974	38,548	***	1,894	***	***
1975	16,326	***	1,780	***	***
July-December:					
1974	21,272	***	990	***	***
1975	18,842	***	1,263	***	***
January-September					
1976	18,574	***	1,799	***	***

1/ Production--estimated on the basis of the value of noncaptive shipments; exports--f.o.b. plant of manufacture as reported in responses to U.S. International Trade Commission questionnaires; imports--foreign port of embarcation as reported by the U.S. Department of Commerce.

Source: Compiled from official statistics of the U.S. Department of Commerce and responses to U.S. International Trade Commission questionnaires.

Employment

Total employment of production and related workers involved in the production of melamine in the United States reached a 1971-75 peak of 331 workers in 1974 but declined to 204 workers in 1975. During January-September 1976, such workers numbered 224. As table 8 indicates, in 1975, employment associated with melamine declined more rapidly than employment in other product lines of the establishments concerned. In 1976

Table 8.—Production and related workers engaged in the production of all products and in the production of melamine only in the U.S. establishments producing melamine, and the percentage change in employment from each preceding period, 1971-75, July-December 1974, July-December 1975, and January-September 1976

Period	Production and related workers employed on--		Percentage change from preceding period in employment on--	
	All products	Melamine	All products	Melamine
	Number	Number	Percent	Percent
1971	1,437	211	1/	1/
1972	1,445	181	0.6	-14.2
1973	812	238	-43.8	31.5
1974	915	331	12.7	39.1
1975	807	204	-11.8	-38.4
July-December--				
1974	843	238	1/	1/
1975	711	207	-15.7	-13.0
January-September 1976	756	224	1/	1/

1/ Not available.

Source: Compiled from data submitted by U.S. producers in response to questionnaires of the U.S. International Trade Commission.

employment on melamine appears to have increased from what it was in 1975, while employment on the other product lines appears to have declined.

Time worked in the production of melamine by production and related workers in all U.S. establishments producing melamine during the period 1971-75 reached a high of 572,000 man-hours in 1974, declined to 490,000 in 1975 (or an average of 41,000 man-hours per month), and amounted to 423,000 man-hours in January-September 1976 (or an average of 47,000 man-hours per month), as shown in table 9.

Table 9.—Man-hours worked in the production of all products, and in the production of melamine only in the U.S. establishments producing melamine only, and the percentage change in man-hours worked from each preceding period, 1971-75, July-December 1974, July-December 1975, and January-September 1976

Period	Man-hours worked by production and related workers employed on--		Percentage change from preceding period in man-hours worked on--	
	All products	Melamine	All products	Melamine
	1,000 man-hours	1,000 man-hours	Percent	Percent
1971	2,203	308	1/	1/
1972	2,864	522	30.0	69.5
1973	1,595	448	-44.3	-14.2
1974	1,769	572	10.9	27.7
1975	1,638	490	-7.4	-14.3
July-December--				
1974	889	281	1/	1/
1975	807	280	-9.2	-
January-September 1976	1,240	423	1/	1/

1/ Not available.

Source: Compiled from data submitted by U.S. producers in response to questionnaires of the U.S. International Trade Commission.

* * * * * * *

Financial experience of domestic producers

Profit-and-loss and other financial data were received from four domestic producers of melamine representing all of the domestic shipments of melamine in the United States for the periods 1971-75, July-December 1974, July-December 1975, and January-September 1976. One of the producers covered, Premier, discontinued production of melamine in the early part of 1973.

In the aggregate, the net sales and intracompany transfers of melamine by the U.S. producers increased annually throughout the period 1971-75. Net sales increased from $10.8 million in 1971 to $25.3 million in 1975 (table 10).

Net operating profits for these firms rose from a loss position in 1971 to a peak profit position in 1974, with profits falling off in 1975. Net operating losses fell from $3.3 million in 1971 to $530,000 in 1972. The industry as a whole remained profitable for the ensuing years of the period, with net operating profits of approximately $5.0 million in 1973, $8.3 million in 1974, and $6.6 million in 1975. The ratio of net operating profit or loss to net sales followed the same trend as that of dollar operating profits by showing a decrease in operating loss from 30.1 percent in 1971 to 3.5 percent in 1972, and then an increase in net operating profits from 27.6 percent in 1973 to 36.0 percent in 1974 before falling to 26.1 percent in 1975. 1/

1/ * * * .

Table 10.--Aggregate profit-and-loss experience of the domestic producers of melamine on their melamine operations, 1971-75, July-December 1974, July-December 1975, and January-September 1976

(In thousands of dollars)

Period	Net sales	Cost of goods sold	Gross profit or (loss)	General selling and administrative expense	Net operating profit or (loss)	Other income or (expense), net	Net income or (loss) before taxes	Ratio of net operating profit or (loss) to net sales
1971	10,825	13,305	(2,480)	776	(3,256)	(932)	(4,188)	(30.1)
1972	15,124	14,806	318	848	(530)	(555)	(1,085)	(3.5)
1973	18,007	12,265	5,742	781	4,961	(588)	4,373	27.6
1974	23,067	13,801	9,266	961	8,305	(112)	8,193	36.0
1975	25,346	17,581	7,765	1,143	6,622	(484)	6,138	26.1
July-Dec. 1974	13,988	7,115	6,873	485	6,388	(234)	6,154	45.7
July-Dec. 1975	12,857	9,917	2,940	955	1,985	85	2,070	15.4
Jan.-Sept. 1976	24,850	14,488	10,362	1,189	9,173	(27)	9,146	36.9

Source: Compiled from data submitted to the U.S. International Trade Commission by domestic producers.

Net profit or loss before income taxes and after other income and expense items reported by the firms increased from a net loss of $4.2 million in 1971 to a net profit of $8.2 million in 1974 and then fell to a profit of $6.1 million in 1975.

The years 1971-72 were by far the worst years for the profitability of the U.S. producers of melamine, with all but one producer sustaining a loss in both years. * * *. Table 11 shows the profit-and-loss data for the four U.S. producers during recent years, by company. The U.S. producers did poorly in those years primarily because three of the producers initiated production of melamine by a new (the DSM) process in 1971, resulting in a number of production problems that have only recently been solved. * * * asserted that it had experienced a low profit during 1971 and 1972 because of poor market conditions.

The year 1975 was a year of lower profits for each of the remaining three U.S. producers; in the aggregate, net operating profits were down approximately 20 percent from 1974, the most profitable year. * * *.

Table 11.--Profit-and-loss experience of all domestic producers of melamine on their melamine operations only, 1971-75, July-December 1974, July-December 1975, and January-September 1976

Year and company	Net sales	Cost of goods sold	Gross profit or (loss)	General selling and administrative expense	Net operating profit or (loss)	Other income or (expense), net	Net profit or (loss) before taxes	Ratio of net operating profit or (loss) to net sales
1971								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Premier Petrochemical Co	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
1972								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Premier Petrochemical Co	***	***	***	***	***			
Total	***	***	***	***	***	***	***	***
1973								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
1974								
Allied Chemical Corp.	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
1975								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
July-December 1974								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc.	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
July-December 1975								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc.	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***
January-September 1976								
Allied Chemical Corp	***	***	***	***	***	***	***	***
American Cyanamid Co. 1/	***	***	***	***	***	***	***	***
Melamine Chemicals, Inc. 2/	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***

1/ * * *.
2/ * * *.

Source: Compiled from data submitted to the U.S. International Trade Commission by domestic producers.

The trend in profit ratios for the melamine producers parallels the trend in profit ratios for all manufacturers of industrial chemicals and synthetics, but the melamine producers maintained a much higher profit ratio throughout the 3-year period 1973-75, as shown in table 12.

Table 12.—Ratios of net profit before income taxes to net sales for all manufacturers of industrial chemicals and synthetics and for all manufacturers of melamine, 1973-75

Item	1973	1974	1975
All manufacturers of industrial chemicals and synthetics	11.3	12.2	10.8
Melamine industry	24.3	35.5	24.2

Source: Quarterly Financial Report for Manufacturing Mining and Trade Corporations published by the Federal Trade Commission; figures on melamine industry compiled from data submitted to the U.S. International Trade Commission by domestic producers.

Financial data also were received from domestic producers for the periods July-December 1974 and July-December 1975; the latter period covers the entire period of the Treasury investigation of sales at less than fair value. These data are shown in the aggregate for the three remaining U.S. producers in table 10, and by individual firms in table 11.

Net sales of melamine by the three remaining U.S. producers decreased slightly from approximately $14 million for the period July-December 1974 to $12.9 million for the same period in 1975--or by about 8 percent. * * * .

Net operating profits and the ratio of net operating profit to net sales also declined in July-December 1975 but to a much greater extent. The net operating profit went from $6.4 million or 45.7 percent of net sales for July-December 1974 to $2.0 million or 15.4 percent of net sales for July-December 1975. * * * .

Current year data covering the period January-September 1976 show all three producers in improved profit positions from their financial status in 1975. * * *.

The Japanese industry

The Japanese industry consists of three producers: Mitsui Toatsu, Nippon Carbide, and Nissan. All three producers manufacture melamine from urea. Nippon Carbide is not currently manufacturing melamine and is reported to have no plans to do so before 1978. * * *. Nissan exports more than 90 percent of all Japanese manufactured melamine sold in the United States and was the sole subject of Treasury's investigation. Nissan has exported no melamine to the United States since March 1976.

Causal Relationship Between Alleged Injury and LTFV Imports

Market penetration of LTFV sales

Treasury reported that virtually all of the imported melamine from Japan is manufactured by one firm--Nissan. In its investigation, Treasury found LTFV margins on 100 percent of the sales compared. LTFV imports can thus be considered to include all melamine imported from Japan.

During the period of LTFV sales (July-December 1975), Japanese melamine represented 85 percent of U.S. melamine imports in terms of both quantity and value.

The ratio of imports of melamine from Japan to U.S. consumption of melamine fluctuated from * * * percent in 1971 to * * * percent in 1974,

and in 1975 it rose to * * * percent, as shown in table 13. During July-December 1975, the ratio of imports of LTFV melamine from Japan to U.S. consumption was * * * percent.

Table 13.—Melamine: U.S. imports from Japan and apparent U.S. consumption 1971-75

Year	U.S. imports from Japan	Apparent U.S. consumption	Ratio of U.S. imports from Japan to U.S. consumption
	Million pounds	Million pounds	Percent 1/
1971	7.8	***	***
1972	5.7	***	***
1973	.3	***	***
1974	2.8	***	***
1975	5.1	***	***

1/ Percentages are calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce and responses to U.S. International Trade Commission questionnaires.

Imports of melamine from Japan declined in the early years of the 1970's as the three U.S. plants utilizing the DSM technology began operation. These imports fell from 7.8 million pounds in 1971 to a low of 300,000 pounds in 1973. The volume of imports from Japan then increased substantially in 1974 and was nearly twice as great in 1975 as it had been in 1974. During the first quarter of 1976, U.S. imports of melamine from Japan amounted to 1.7 million pounds, but such imports ceased after March.

Evidence of lost sales by domestic producers to LTFV imports from Japan

Both MCI and Allied claim lost sales of melamine in the U.S. market to Nissan because of LTFV competition. In the Commission's public hearing in this investigation, MCI officials asserted that their melamine sales to two customers--Plastics Manufacturing Co. (PMC) of Dallas, Tex., and Monsanto of St. Louis, Mo.--diminished substantially in 1975 and early 1976 because of displacement by Nissan's LTFV sales. In responses to the Commission's questionnaires, MCI and Allied alleged possible sales losses to certain other of their customers, which were believed to have purchased melamine from Nissan during the period of LTFV sales. A survey of the named customers was undertaken and the statistical data obtained from them is presented in tables 14 and 15.

* * *. PMC, however, developed credit problems with MCI in the last quarter of 1974. These problems evidently stemmed from PMC's practice of utilizing 60-day terms during its annual inventory-building periods. The president of PMC asserted in the Commission's hearing that this was his firm's standard practice, even though its contract with MCI at that time specified 30-day terms. PMC's president further testified that his firm's credit was recognized by all of its suppliers as good; he has since submitted documents to the Commission's staff which show PMC's Dun & Bradstreet credit rating to be * * *. 1/ He has

1/ * * * *.

Table 14.--Melamine: Purchases from MCI, Allied, American Cyanamid, Nissan, and other suppliers, by selected customers, 1973-75, July-December 1974, July-December 1975, and January-September 1976

(In thousands of pounds)

Customer and period	U.S. suppliers					Foreign suppliers			Total
	MCI	Allied	American Cyanamid	Domestic manufacture sold through brokers	Total	Nissan	All other	Total	
PMC:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Pioneer Plastics:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Monsanto (Santa Clara plant only):									
1973									
1974	*	*	*	*	*	*	*	*	
1975									
July-December--									
1974									
1975									
January-September 1976									
Westinghouse Electric:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Pacific Resins & Chemicals:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									

1/ * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 15.--Melamine: Proportions of total domestic purchases of selected U.S. customers supplied by U.S. and foreign producers, 1973-75, July-December 1974, July-December 1975, and January-September 1976

(In percent)

Customer and period	U.S. suppliers					Foreign suppliers			Total
	MCI	Allied	American Cyanamid	Domestic manufacture sold through brokers	Total	Nissan	All other	Total	
PMC:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Pioneer Plastics:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Monsanto (Santa Clara plant only):									
1973									
1974									
1975									
July-December--									
1974		*	*	*	*	*	*	*	*
1975									
January-September 1976									
Westinghouse Electric:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									
Pacific Resins & Chemicals:									
1973									
1974									
1975									
July-December--									
1974									
1975									
January-September 1976									

Source: Compiled from data presented in table 14.

also submitted correspondence that indicates that MCI later agreed in writing to the credit terms his firm had previously used (i.e., 60-day terms).

As a result of this credit dispute, PMC bought its melamine requirements of * * * from another domestic supplier, American Cyanamid, from mid-October 1974 through the end of that year. In 1975 PMC purchased * * * percent of its requirements from Nissan. Its initial purchases were made at prices higher than the prevailing domestic prices. During July-December 1975, however, * * * percent of PMC's purchases were made from Nissan at LTFV prices.

Pioneer Plastics Co. bought * * * percent of its 1975 melamine requirements from Nissan. All purchases from Nissan in 1975 were made during the LTFV period. During 1974, Pioneer Plastics purchased * * * percent of its requirements from * * * and the remaining * * * from * * *.

Monsanto, headquartered in St. Louis, Mo., has five plants that buy melamine; however, only the plant in Santa Clara, Calif. has purchased melamine from Nissan. In 1974, Japanese melamine (manufactured by Nippon Carbide) accounted for * * * percent of the Santa Clara plant's total purchases. In 1975 Nissan supplied * * * percent of Monsanto's purchases at Santa Clara, which accounted for all of its purchases of foreign melamine. Although MCI's total sales to Monsanto's Santa Clara plant dropped slightly from 1974 to 1975, the proportion of Monsanto's requirements which MCI supplied actually increased between 1974 and 1975, from * * * percent to * * * percent.

Westinghouse Electric Co. relied on foreign sources to furnish some of its melamine needs in each of the years 1973-75. In 1973 and 1974, Westinghouse purchased European melamine which amounted to * * * percent and * * * percent, respectively, of its total purchases. In 1975 Nissan supplied * * * percent of Westinghouse's requirements. However, * * * of these purchases were made in the first half of the year, and not during the LTFV period. Purchases from * * * increased more rapidly in 1975 than did purchases from Nissan. For the years 1973-75, * * * was by far the largest supplier of Westinghouse's requirements.

* * * was the sole supplier of melamine to Pacific Resins and Chemicals in the years 1973 and 1974. In 1975 Pacific Resins purchased * * * of its requirements from Nissan. * * * purchases from Nissan in 1975 were made during the LTFV period. * * *.

* * * * * * *

With the exception of PMC, which stressed quality considerations, all of the companies that purchased Nissan melamine stated that price was the determining factor in their decision to buy from Nissan. Several purchasers emphasized the importance of low priced melamine from Japan and Europe in enabling them to maintain adequate profit margins. One official from * * *, which purchases melamine from both Austrian and domestic sources, commented that the price for melamine-formaldehyde resins (condensate) was not keeping pace with the increasing price of melamine. Consequently, he did not feel that his company would be able to stay in business if he were forced to buy melamine from domestic producers or at increased prices from importers. All of * * * purchases in 1976 have been from Austria.

Similar comments were made by officials of * * *, a firm that went out of the melamine-formaldehyde resin business in 1974 because of rising melamine prices.

Pricing Practices

Prices for melamine from domestic manufacturers are negotiated on the basis of published price lists. Prices for melamine from domestic and foreign suppliers are negotiated on annual contracts, and on spot sales made on an intermittent basis. Because of changes in supply availability and cost, list prices are often not indicative of market price. For example, although the list price for domestic melamine sold in bags was established at 19.5 cents per pound in 1974, the market price increased to 35 to 36 cents per pound by the end of the year.

Melamine prices are influenced by order size, competitors' prices, and type of packaging used, in addition to supply and cost factors. Imported melamine is available only in bags, while domestic melamine is sold both in bags and in bulk form. Melamine in bulk form is generally priced 1 to 2 cents per pound less than melamine sold in bags; however, the price differential between bulk and bag shipments varied considerably in the years 1973 and 1974. Allied and American Cyanamid sell principally in bulk form, while MCI sells primarily in bags. However, MCI's * * * customer (American Cyanamid) buys in bulk quantities from MCI.

Since 1972, domestic melamine prices have generally been quoted f.o.b. plant of manufacture. Prior to that year, however, domestic producers sold on the basis of delivered prices. In an effort to offset rising freight rates, domestic manufacturers changed their pricing schedule to a nondelivered basis in 1972. Importers' prices are generally quoted on a port-of-entry, duty-paid basis.

Prices

Summary.—As indicated in table 16, importers' weighted average prices exceeded U.S. producers' weighted average prices of melamine throughout 1973 and in 8 of the 10 months of 1974 for which such comparisons are available. In 1975 and 1976, the price picture changed, and importers' weighted average prices were below domestic producers' weighted average prices in 11 months of 1975 and in each of the 6 months in 1976 in which such prices were reported.

Importers' prices shown in table 16 include prices of Japanese and European melamine. Prices of Japanese melamine (detailed in table 17) tended to be above the average prices of all importers in 1973, 1974, and the first 6 months of 1975. During the last 6 months of 1975 and the first 3 months of 1976, prices of Japanese melamine in general were below the average prices of all importers.

In table 16, prices of domestic melamine sold in both bulk and bag form are compared with prices of imported melamine sold in bag form only. This is necessary since over 60 percent of domestically produced melamine is shipped in bulk form. Imports of bagged melamine compete with the domestic product whether in bags or in bulk.

As mentioned above, prices of U.S. producers and importers of melamine are quoted on a nondelivered basis. Domestic prices are reported f.o.b. plant of manufacture, and importers' prices are quoted on a port-of-entry, duty-paid basis.

Table 16.--Melamine: Net selling prices 1/ received by U.S. producers for melamine in bulk and bag form and by importers for melamine in bag form, by months, 1973-75 and January-September 1976

Year and month	U.S. producers' price 2/		Importers' price		U.S. producers' more or less (-) than importers' price	Ratio of importers' price to U.S. producers' price
	Range	Weighted average	Range	Weighted average		
	Cents per pound	Cents per pound	Cents per pound	Cents per pound	Cents per pound	Percent
1973:						
January	* * *	15.7	* * *	* * *	* * *	* * *
February	* * *	15.9	* * *	* * *	* * *	* * *
March	* * *	16.4	* * *	* * *	* * *	* * *
April	* * *	16.1	* * *	* * *	* * *	* * *
May	* * *	16.4	* * *	* * *	* * *	* * *
June	* * *	16.5	* * *	* * *	* * *	* * *
July	* * *	16.3	* * *	* * *	* * *	* * *
August	* * *	16.3	* * *	* * *	* * *	* * *
September	* * *	16.7	* * *	* * *	* * *	* * *
October	* * *	17.7	* * *	* * *	* * *	* * *
November	* * *	17.2	* * *	* * *	* * *	* * *
December	* * *	17.1	* * *	* * *	* * *	* * *
1974:						
January	* * *	19.7	* * *	* * *	* * *	* * *
February	* * *	22.7	* * *	* * *	* * *	* * *
March	* * *	25.3	* * *	* * *	* * *	* * *
April	* * *	25.4	* * *	* * *	* * *	* * *
May	* * *	26.7	* * *	* * *	* * *	* * *
June	* * *	28.4	* * *	* * *	* * *	* * *
July	* * *	29.6	* * *	* * *	* * *	* * *
August	* * *	31.1	* * *	* * *	* * *	* * *
September	* * *	31.8	* * *	* * *	* * *	* * *
October	* * *	32.1	* * *	* * *	* * *	* * *
November	* * *	32.1	* * *	* * *	* * *	* * *
December	* * *	34.0	* * *	* * *	* * *	* * *
1975:						
January	* * *	35.8	* * *	* * *	* * *	* * *
February	* * *	35.2	* * *	* * *	* * *	* * *
March	* * *	33.9	* * *	* * *	* * *	* * *
April	* * *	33.6	* * *	* * *	* * *	* * *
May	* * *	33.2	* * *	* * *	* * *	* * *
June	* * *	33.4	* * *	* * *	* * *	* * *
July	* * *	33.4	* * *	* * *	* * *	* * *
August	* * *	32.5	* * *	* * *	* * *	* * *
September	* * *	32.8	* * *	* * *	* * *	* * *
October	* * *	32.7	* * *	* * *	* * *	* * *
November	* * *	32.8	* * *	* * *	* * *	* * *
December	* * *	31.6	* * *	* * *	* * *	* * *
1976:						
January	* * *	33.1	* * *	* * *	* * *	* * *
February	* * *	33.3	* * *	* * *	* * *	* * *
March	* * *	33.1	* * *	* * *	* * *	* * *
April	* * *	33.2	* * *	* * *	* * *	* * *
May	* * *	33.2	* * *	* * *	* * *	* * *
June	* * *	33.2	* * *	* * *	* * *	* * *
July	* * *	34.6	* * *	* * *	* * *	* * *
August	* * *	35.0	* * *	* * *	* * *	* * *
September	* * *	35.0	* * *	* * *	* * *	* * *

1/ Based on monthly shipments to each company's largest customers.
2/ Includes data from Premier Petrochemicals Co. for January-July 1973.
3/ * * * .

Source: Compiled from U.S. producers' and importers' responses to questionnaires of the U.S. International Trade Commission.

Note.--U.S. producers' prices are f.o.b. plant of manufacture; importers' prices are port-of-entry, duty-paid prices.

Table 17.--Melamine: Average selling prices received by U.S. importers of Japanese melamine, by months, 1973-75 and January-April 1976

(In cents per pound)

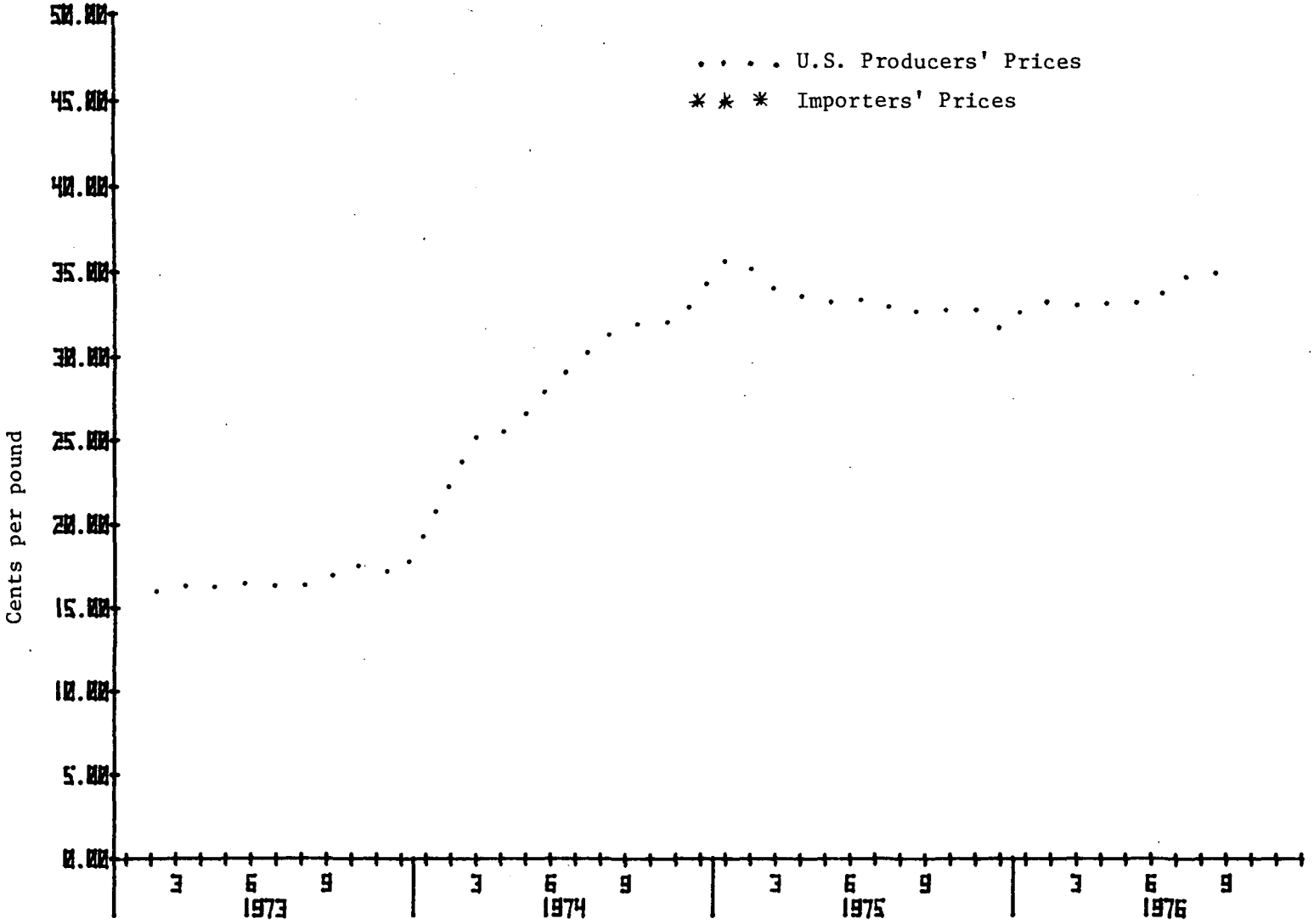
Year and month	Average selling price 1/
1973:	
January	* * *
February	* * *
March	* * *
April	* * *
May	* * *
June	* * *
July	* * *
August	* * *
September	* * *
October	* * *
November	* * *
December	* * *
1974:	
January	* * *
February	* * *
March	* * *
April	* * *
May	* * *
June	* * *
July	* * *
August	* * *
September	* * *
October	* * *
November	* * *
December	* * *
1975:	
January	* * *
February	* * *
March	* * *
April	* * *
May	* * *
June	* * *
July	* * *
August	* * *
September	* * *
October	* * *
November	* * *
December	* * *
1976:	
January	* * *
February	* * *
March	* * *
April	* * *

1/ Variations between prices calculated on arithmetic- and weighted-average bases were slight, with average price equaling weighted average prices in many months. The principal exception to this was in September 1974, when the average price exceeded the weighted average price by *** cents.

Source: Compiled from U.S. importers' responses to questionnaires of the U.S. International Trade Commission.

Note.--The prices shown above are port-of-entry, duty-paid prices.

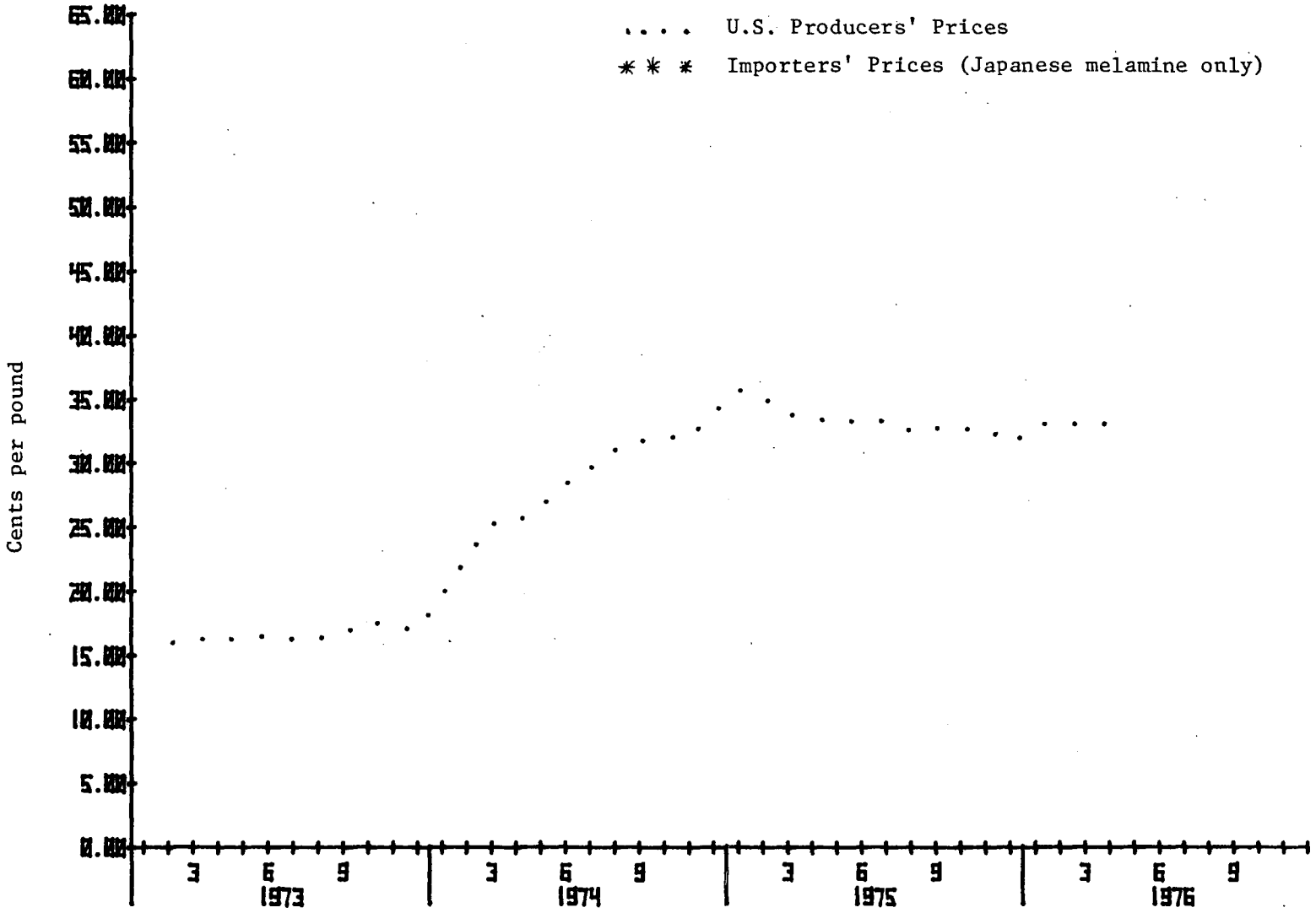
Figure 1.--Melamine: Weighted average net selling prices 1/ received by U.S. producers and importers of melamine, monthly, January 1973-September 1976



1/ Price data are taken from table 15.

Source: Compiled from U.S. producers' and importers' responses to questionnaires of the U.S. International Trade Commission.

Figure 2.--Melamine: Net selling prices 1/ received by U.S. producers and and importers of Japanese melamine, monthly, January 1973-April 1976



1/ Price data are taken from tables 15 and 16.

Source: Compiled from U.S. producers' and importers' responses to questionnaires of the U.S. International Trade Commission.

* * * * * * *

Table 18.--Melamine: Ranges of net selling prices of U.S. producers and importers for bag shipments of melamine, by months, 1973-75 and January-September 1976

(In cents per pound)

Year and month	Price range of--	
	U.S. producers	Importers
1973:		
January	* * *	* * *
February	* * *	* * *
March	* * *	* * *
April	* * *	* * *
May	* * *	* * *
June	* * *	* * *
July	* * *	* * *
August	* * *	* * *
September	* * *	* * *
October	* * *	* * *
November	* * *	* * *
December	* * *	* * *
1974:		
January	* * *	* * *
February	* * *	* * *
March	* * *	* * *
April	* * *	* * *
May	* * *	* * *
June	* * *	* * *
July	* * *	* * *
August	* * *	* * *
September	* * *	* * *
October	* * *	* * *
November	* * *	* * *
December	* * *	* * *
1975:		
January	* * *	* * *
February	* * *	* * *
March	* * *	* * *
April	* * *	* * *
May	* * *	* * *
June	* * *	* * *
July	* * *	* * *
August	* * *	* * *
September	* * *	* * *
October	* * *	* * *
November	* * *	* * *
December	* * *	* * *
1976:		
January	* * *	* * *
February	* * *	* * *
March	* * *	* * *
April	* * *	* * *
May	* * *	* * *
June	* * *	* * *
July	* * *	* * *
August	* * *	* * *
September	* * *	* * *

1/ Importers did not report sales during this month.

Source: Compiled from U.S. producers' and importers' responses to questionnaires of the U.S. International Trade Commission.

Note.--U.S. producers' prices are f.o.b. plant of manufacture; importers' prices are port-of-entry, duty-paid prices.

* * * * * * *

* * * * * * *

Price suppression

At the Commission's public hearing in this investigation, MCI stated that it lowered its price for bagged melamine by 8 percent, from 36.0 cents to 34.5 cents per pound, in early 1975. The attorney for MCI stated that this action ". . . was brought about by the unstable market conditions for melamine in this country, and we tend to feel that the threat of imports coming back into the country was a contributing factor to this." MCI further claimed that it was unable to raise its price of 34.5 cents for 15 months because of LTFV sales by Nissan. 1/ MCI alleged that prices were suppressed during this period, and consequently MCI was unable to get relief from rising costs during an inflationary period.

1/ Substantial increases in MCI's domestic melamine prices occurred in 1973 and 1974, however.

Price indexes of melamine were compared with price indexes of other chemical and industrial commodities to determine if price suppression/depression had occurred in 1975 and 1976. Price indexes for melamine and various industry groups are shown in table 19. The data indicate that melamine prices rose very sharply in 1973 and 1974 in comparison with other commodities. U.S. producers' average prices increased from 16.3 cents per pound in July 1973 to 29.6 cents per pound in July 1974, a jump of approximately 82 percent. In comparison, prices for industrial chemicals and agricultural chemical products rose about 50 percent and 36 percent, respectively, during the same period.

Between January and July 1975, melamine prices declined by 6.7 percent. In contrast, prices of agricultural chemicals and chemical products increased by 10.6 percent. The prices of other related commodities also increased during this period. In January 1976, melamine prices again registered a slight decline (0.9 percent) from the price level in July 1975. During the same period, the price index for industrial chemicals rose by 3 percent, the price index for chemicals and allied products rose by 1.6 percent, and the price index for industrial commodities rose by 3.6 percent. Only one other commodity sector studied did not experience a rise in its price index between July 1975 and January 1976. The price index for that sector, agricultural chemicals and chemical products, fell by 5 percent.

Table 19.--Price indexes for melamine, industrial chemicals, chemicals and allied products, agricultural chemicals and allied products, and industrial commodities, January and July of 1973-76

(January 1973 = 100)

Year and month	Melamine	Industrial chemicals	Chemicals and allied products	Agricultural chemicals and chemical products	Industrial commodities
1973:					
January	100.0	100.0	100.0	100.0	100.0
July	103.8	102.0	105.4	104.0	105.8
1974:					
January	125.5	106.6	112.5	120.8	112.8
July	188.5	153.3	141.2	140.9	131.5
1975:					
January	228.0	194.1	167.5	204.4	139.6
July	212.7	203.5	172.6	226.1	142.7
1976:					
January	210.8	209.7	175.3	214.7	147.8
July	220.4	216.2	177.9	198.5	152.2

Source: U.S. Department of Commerce, Survey of Current Business, except for data on melamine, which was computed from U.S. producers' responses to questionnaires of the U.S. International Trade Commission.

In comparing prices on a full-year basis between January 1975 and January 1976, melamine was the only industry grouping in which prices declined. Melamine prices decreased by 7.5 percent in 1975, while prices of industrial chemicals and agricultural chemicals rose by 8 percent and 5 percent, respectively, in 1975.

Between January and July 1976, melamine prices increased at a faster rate than prices in the other industry groupings.

Factors other than price

The President of PMC, in his testimony before the Commission, contended that Nissan produces a higher quality of melamine than any domestic producer. However, he did not testify that he would be willing to pay a premium price to acquire the Nissan-produced melamine. He did state at the hearing that he was interested in obtaining melamine for the lowest possible price.

Several other purchasers of melamine indicated that they preferred one supplier over another, but that preferences would have a bearing on their purchases only if prices were equal.

A number of sources stated that the production of melamine-formaldehyde resins is more an art than a science. For this reason, melamine from one supplier may work better for the production processes of one user than all others, and this same product may be completely unsatisfactory for the production processes of another user. All users but PMC, however, seem willing to make adjustments in their production

processes to compensate for the differences in melamine supplied by the various manufacturers.

For a few users, some of the melamine supplied in bags is not acceptable because of the small crystal size. These users' production processes are set up to move the melamine pneumatically. The property of smaller crystals to adhere to each other renders a pneumatic transport system inoperative. Bulk users do not usually purchase the Japanese melamine since it is available only in bags.

APPENDIX

TREASURY MEMORANDA RELATING TO THE DETERMINATION OF SALES AT LTFV

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Library Cataloging Data

U.S. International Trade Commission.
Melamine in crystal form from Japan. Determination of injury in investigation no. AA1921-162 under the Antidumping act, 1921, as amended, together with the information obtained in the investigation. Washington, 1976.

16, A1-72 p. illus. 27 cm. (USITC Publication 796)

1. Melamine crystals--Japan. I. Title.

UNITED STATES
INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C 20436

OFFICIAL BUSINESS

ADDRESS CORRECTION REQUESTED

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

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ADDRESS CHANGE
[ ] Remove from List
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Please detach address label and mail to address shown above.