

SORBITOL FROM FRANCE

**Determination of the Commission
in Investigation No. 731-TA-44
(Preliminary) Under the
Tariff Act of 1930, Together
With the Information Obtained
in the Investigation**

USITC PUBLICATION 1168

JULY 1981



UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Bill Alberger, Chairman

Michael J. Calhoun, Vice Chairman

Catherine Bedell

Paula Stern

Kenneth R. Mason, Secretary to the Commission

This report prepared by:

Miriam A. Bishop, Investigator
Bonnie Noreen, Office of Industries
Anita Miller, Office of Economics
Michael Jennison, Office of the General Counsel
Catherine Field, Office of the General Counsel

Vera A. Libeau, Supervisory Investigator

Address all communications to
Office of the Secretary
United States International Trade Commission
Washington, D.C. 20436

C O N T E N T S

	<u>Page</u>
Determination-----	1
Views of the Commission-----	3
Information obtained in the investigation	
Introduction-----	A- 1
The product:	
Description-----	A- 1
The product imported from France-----	A- 2
Uses-----	A- 2
U.S. tariff treatment-----	A- 3
Nature and extent of alleged sales at less than fair value-----	A- 4
U.S. market and channels of distribution-----	A- 4
The domestic industry:	
U.S. producers-----	A- 6
U.S. importers-----	A- 7
Foreign producers-----	A- 8
The question of injury or likelihood thereof:	
U.S. production, capacity, and capacity utilization-----	A- 8
U.S. producers' commercial shipments-----	A-11
Inventories-----	A-14
Apparent U.S. consumption-----	A-17
U.S. employment and wages-----	A-17
Financial performance of U.S. producers-----	A-20
The question of the causal relationship between alleged LTFV imports from France and the alleged injury:	
U.S. imports and market penetration of alleged LTFV imports-----	A-22
Prices-----	A-24
Lost sales-----	A-31
Appendix A. Notice of Commission's investigation and conference-----	A-33
Appendix B. Department of Commerce's notice of initiation of anti- dumping investigation-----	A-35
Appendix C. Calender of public conference-----	A-37

Tables

1. Sorbitol: Selected firms' imports, by types and by sources, 1978-1980, January-May 1980, and January-May 1981-----	A- 9
2. Sorbitol: U.S. production, by types and by firms, 1978-80, January- May 1980, and January-May 1981-----	A-10
3. Sorbitol: U.S. production, production capacity, and capacity utilization, by firms, 1978-80, January-May 1980, and January- May 1981-----	A-12
4. Sorbitol: U.S. producers' commercial shipments, by types and by firms, 1978-80, January-May 1980, and January-May 1981-----	A-13
5. Sorbitol: U.S. producers' inventories, by types and by firms, as of Dec. 31 of 1978-80, May 31, 1980, and May 31, 1981-----	A-15
6. Sorbitol: U.S. production, imports for consumption, net change in inventories, exports, and apparent consumption, 1978-80, January- May 1980, and January-May 1981-----	A-18

C O N T E N T S

	<u>Page</u>
7. Sorbitol: U.S. producers' open-market shipments, imports for consumption, net change in inventories, exports, and apparent open-market consumption, 1978-80, January-May 1980, and January-May 1981-----	A-18
8. Average number of employees, total and production and related workers engaged in the manufacture of sorbitol, and wages paid to and hours worked by production and related workers producing sorbitol, by firms, 1978-80, January-May 1980, and January-May 1981-----	A-19
9. Profit-and-loss experience of selected U.S. producers of sorbitol on their sorbitol operations, by firms, 1978-80-----	A-21
10. U.S. producers' cash flow from operations on sorbitol, by selected firms, 1978-80-----	A-22
11. Sorbitol: U.S. imports for consumption, by sources, 1978-80, January-May 1980, and January-May 1981-----	A-23
12. Sorbitol: Imports by selected U.S. importers, by sources, 1978-80, January-May 1980, and January-May 1981-----	A-25
13. Crystalline sorbitol: U.S. producers' weighted average prices to major end users, by firms and by periods, January 1978-May 1981-----	A-26
14. Crystalline sorbitol: Weighted average prices to end users of imported and domestic merchandise, by periods, January 1978-May-1981-----	A-27
15. Liquid sorbitol: U.S. producers' weighted average prices to major end users, by firms and by periods, January 1978-May 1981-----	A-28
16. Liquid sorbitol: Weighted average prices to end users of imported and domestic merchandise, by periods, January 1978-May 1981-----	A-29
17. Liquid sorbitol: Merck's and Lonza's prices to major toothpaste producers, by periods, January 1978-May 1981-----	A-30

Note.--Information which would disclose the confidential operations of individual concerns may not be published and has, therefore, been deleted from this report. These deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

Investigation No. 731-TA-44 (Preliminary)

SORBITOL FROM FRANCE

Determination

On the basis of the record 1/ developed in investigation No. 731-TA-44 (Preliminary), the Commission unanimously determines that there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, 2/ by reason of imports of sorbitol from France, provided for in item 493.68 of the Tariff Schedules of the United States, which are allegedly being sold in the United States at less than fair value (LTFV).

Background

On June 15, 1981, Pfizer Inc., filed a petition with the U.S. International Trade Commission and the U.S. Department of Commerce alleging that sorbitol imported from France is being sold in the United States at LTFV. The Commission instituted a preliminary antidumping investigation under section 733(a) of the Tariff Act of 1930, 19 U.S.C. § 1673b(a), to determine whether there is a reasonable indication that an industry in the United States

1/ The record is defined in section 207.2(j) of the Commission's Rules of Practice and Procedure, 19 C.F.R. § 207.2(j).

2/ Chairman Alberger and Commissioner Bedell found only that there is a reasonable indication that an industry in the United States is materially injured. Material retardation of the establishment of an industry is not at issue in this investigation because five U.S. firms currently produce sorbitol. This issue is not discussed further.

is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of sorbitol from France. The statute directs that the Commission make its determination within 45 days of its receipt of the petition or, in this investigation, by July 30, 1981.

Notice of the institution of the Commission's investigation and of a public conference to be held in connection with the investigation was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register. 46 Fed. Reg. 32700 (June 24, 1981). A public conference was held in Washington, D.C., on July 13, 1981, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

Our determination is based on the following considerations.

The domestic industry

Section 771(4)(A) of the Tariff Act of 1930 defines the term industry as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 1/ A like product is defined as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation." 2/

The subject of this investigation is sorbitol imported from France in two forms, crystalline and liquid. 3/ U.S. firms produce crystalline sorbitol and liquid sorbitol. Some U.S. producers also manufacture technical grades of sorbitol. Nearly all technical grades of sorbitol are manufactured from a different raw material (fructose) in a separate manufacturing process than liquid and crystalline sorbitol. 4/ For the most part, technical grades of sorbitol have distinct uses.

Crystalline and liquid sorbitol are produced from the same primary raw material, dextrose derived from corn, and all are manufactured by similar

1/ 19 U.S.C. § 1677(4)(A).

2/ Id. § 1677(10).

3/ Pfizer petition at 1. Liquid sorbitol conforms to United States Pharmacopoeia (USP) specifications for a 70 percent solution. All crystalline sorbitol also conforms to USP specifications.

4/ Sorbitol can occur in nonisolated form as an intermediate product of ascorbic acid production. Nonisolated sorbitol has never been marketed and has no end use other than continued processing into ascorbic acid and therefore is excluded from the domestic industry as defined. Staff report A-3, A-5. 3

processes. Continued purification and concentration of liquid sorbitol results in the crystalline form. The different forms and grades of sorbitol vary in their purity; however, one producer's crystalline sorbitol is essentially fungible with another producer's product. The same is true for liquid sorbitol. 5/ Crystalline sorbitol, both granular and powdered, is primarily used in sugarless gum, mints, and other confections. Liquid sorbitol is primarily used in toothpastes, cosmetics, foods, pharmaceuticals, and industrial surfactants. For some uses crystalline and liquid sorbitol are substitutable. For other end uses substitution is more difficult, but not impossible. Substitutability is largely a function of the cost of the additional processing necessary to convert from one form to another.

The best evidence available to us at this preliminary stage suggests that both crystalline and liquid sorbitol constitute a single like product. Therefore, we find that the domestic industry consists of all producers of USP isolated sorbitol in either crystalline or liquid form. However, we would not want to preclude arguments in a final investigation that the two forms constitute separate like products.

Available data do not permit the separate identification of technical grades of sorbitol in terms of producers' profits or production processes. Therefore, under section 771(4)(D), the effect of the imports will have to be assessed against domestic production of all sorbitol for the purpose of this preliminary investigation. 6/

5/ USP grade crystalline sorbitol may contain up to 9 percent inert sugars or other polyhydric alcohols and USP grade liquid sorbitol may contain up to 6 percent of these solid impurities. Technical grade liquid sorbitol contains more of these impurities than USP grade sorbitol. Staff report A-2.

6/ 19 U.S.C. § 1677(4)(D).

Reasonable indication of material injury or threat thereof

In making a determination of material injury or threat of material injury by reason of LTFV imports, the Commission is directed to consider, among other factors: (1) the volume of imports of the subject merchandise; (2) the effect of these imports on the price of like products in the United States; and (3) the impact of imports on the affected domestic industry. 7/ The following discussion applies this standard to the facts of this investigation.

Volume of imports. Since 1978 imports of sorbitol from France have increased both absolutely and relatively to consumption. 8/ The level of imports increased steadily between 1978 and 1981, with the greatest increases occurring since 1979. Between 1979 and 1980, imports increased by 72 percent and for the period January-May 1981 imports were 59 percent above the level for January-May 1980.

The increase in imports between 1979 and 1980 is of particular interest because it took place during a period of declining U.S. consumption of sorbitol. 9/ As a result, the ratio of imports to consumption that had grown minimally from 1978 to 1979 increased significantly from 1979 to 1980. In the growing sorbitol market of 1981 the alleged LTFV imports have maintained the market share performance established for the full year 1980 and, compared with

7/ 19 U.S.C. § 1677(7)(B).

8/ Import data used by the Commission were obtained from responses of importers primarily to the Commission's questionnaire. Imports from France have been made by a single U.S. firm and thus the specific figures are confidential. Official Department of Commerce import statistics could not be used for purposes of our analysis of injury since they are not collected on a comparable basis to other data before the Commission. Staff report A-22.

9/ Apparent U.S. open market consumption of sorbitol increased by 5 percent from 1978 to 1979, declined by 7 percent in 1980, and then increased by 8 percent in January-May 1981 over the same period in 1980. Id. at A-18.

the January-May period, have increased their share of the domestic market significantly. 10/

Effect of imports on prices. The Commission's investigation revealed indications of both price suppression and underselling by the alleged LTFV imports. Weighted average prices for crystalline sorbitol increased by 22 percent and those for liquid sorbitol increased by 33 percent for the period under review from January 1978 through May 1981. These price increases, however, failed to keep pace with the 113 percent increase in the price of dextrose, 11/ the primary raw material for the manufacture of sorbitol. 12/ Information on price developments in the toothpaste market support the view that price suppression by imports is taking place. 13/ Within the toothpaste market, where imports have not penetrated significantly, prices rose 45 percent as contrasted with 22 percent and 33 percent increases for general sales.

10/ Vice Chairman Calhoun and Commissioner Stern note that Roquette Frères, the sole French exporter of the alleged LTFV imports, is the largest sorbitol producer in the world and thus presumably is in a position to maintain and possibly increase its exports to the United States. More information--including Roquette Frères' plans to construct a U.S. production facility and its domestic and export commitments--is necessary to evaluate the threat situation and should be available in a final investigation.

11/ Dextrose accounts for roughly 70 percent of the cost of manufacturing sorbitol. Staff report A-21; conference transcript 20, 47.

12/ Commissioner Stern points out that the failure of producer prices to keep up with dextrose price levels could, of course, have as much to do with price suppression caused by price levels of competitive producers or price competition between domestic producers as to price suppression by imports. This issue should be further explored in the final investigation.

13/ Commissioner Stern notes that information developed in this preliminary investigation gives rise to a question of whether it is appropriate to include data on domestic production of sorbitol for the toothpaste market in the profile of the domestic industry's performance.

Sorbitol imports from France consistently undersold the domestic product from 1978 to 1980. Although in 1981 the level of underselling was negligible for crystalline sorbitol, underselling continues in the liquid sorbitol market. We note that underselling was greatest and at significant levels for both liquid and crystalline sorbitol from late 1979 through 1980.

Impact of imports on the domestic producer. Despite the fluctuation in sorbitol consumption from 1979 to 1980, 14/ a number of important indicators of industry performance have declined over the entire period. These performance indicators began to slip between 1978 and 1979 and fell substantially between 1979 and 1980, coincident with the substantial underselling of domestic products by the alleged LTFV imports.

Specific indications of the increasing difficulties faced by the domestic industry include: a 17 percent drop in production from 1979 to 1980 followed by an additional 7 percent drop from January-May 1980 levels during the same period in 1981; a 16 percent drop in shipments from 1979 to 1980 with only negligible growth in shipments from January-May 1981 compared with those for the same period in 1980; a substantial decline in capacity utilization particularly from 1979 to date, which is greater than can be accounted for by capacity increases; and a significant drop in exports by the domestic industry from 1978 to May 1981. 15/

14/ Footnote 9, *supra*.

15/ Declining exports, although not directly attributable to import levels, indicate vulnerability of the industry to import problems.

Employment and profitability data available to the Commission, although representing less than half of the U.S. industry, indicates declining trends. 16/

Further indications of problems facing the industry are reflected in the data obtained on lost sales. The Commission staff confirmed the existence of two lost sales of domestic sorbitol to the imported product as a result of price considerations. 17/ At the conference Roquette Frères confirmed a third lost sale alleged by Pfizer. This sale resulted from a special arrangement in which price may or may not have been a major consideration. The purchaser substituted French sorbitol for the purchase of another Roquette product in order to avoid contract penalties. 18/

16/ Data were requested from the entire industry. A more complete response should be available in a final investigation, particularly on normal profit levels for an industry of this nature.

17/ Staff report A-31 to 32.

18/ Id. at A-31 to 32; Roquette Frères post conference brief at 11-12.

Commissioner Stern notes that both Roquette Frères and Pfizer cited this third lost sale in support of their respective positions. Pfizer contends that this lost sale was due to price considerations and is a further showing of material injury by reason of alleged LTFV imports. Roquette Frères, on the other hand, contends that this lost sale explains almost all the increase in French imports for the period under review and that it was not lost as a result of price considerations. Roquette Frères then concludes that there is no causal nexus between the difficulties the industry may be facing and the alleged LTFV imports.

The circumstances of this lost sale will need to be explored further should this case return for a final investigation, as will other possible causes of injury raised in this investigation such as declining exports and the impact of the recession. Congress has indicated that "the law does not . . . contemplate that injury from LTFV imports be weighted against other factors . . . and further that it does not view overall injury caused by unfair competition, such as dumping to require as strong a causation link to unfairly competitive imports as would be required for determining the existence of injury under fair trade conditions." H.R. Rep. No. 96-317, 96th Cong., 1st Sess. 47 (1979). Although other factors are considered, the essential point is that the Commission "must satisfy itself that in the light

(footnote continued)

Conclusion

On the basis of available data we determine that the investigation should continue.

(footnote continued)

of all the information presented, there is a sufficient causal link between the less-than-fair value imports and the requisite injury." S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979). In this preliminary investigation, the information on import levels and penetration, possible price suppression, and underselling provide a reasonable indication of a causal connection between the alleged LTFV imports and the adverse trends in domestic industry performance.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On June 15, 1981, a petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce on behalf of Pfizer Inc., alleging that sorbitol imported from France is being, or is likely to be, sold in the United States at less than fair value (LTFV). Accordingly, on June 19, 1981, the Commission instituted preliminary antidumping investigation No. 731-TA-44 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or that the establishment of an industry in the United States is materially retarded, by reason of imports of sorbitol, as provided for in item 493.68 of the Tariff Schedules of the United States (TSUS). These imports are allegedly being sold, or likely to be sold, at less than fair value. The statute directs that the Commission make its determination within 45 days of receipt of the petition, or in this case by July 30, 1981.

Notice of the institution of the Commission's investigation and of the public conference to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of June 24, 1981 (46 F.R. 32700). 1/ A public conference was held in Washington, D.C., on July 13, 1981, at which all interested parties were afforded the opportunity to present information for consideration by the Commission. 2/ The Commission voted on this investigation on July 23, 1981.

The Product

Description

Sorbitol is a sugar alcohol found in a variety of fruits, trees, and algae. It is also produced synthetically by the hydrogenation of dextrose (dextrorotary glucose). Chemically, sorbitol is a hexitol--a polyhydric alcohol with six hydroxyl (OH) groups--which has the formula $C_6H_8(OH)_6$.

Commercially, sorbitol is available as a crystalline solid or in an aqueous solution. Crystalline sorbitol, available in both granular and powdered forms, is primarily used in sugarless gums, mints, and other confections. United States Pharmacopoeia (USP) specifications for crystalline sorbitol allow for up to 9 percent of impurities such as other polyhydric alcohols or invert sugars. Virtually all crystalline sorbitol marketed in the United States is USP grade.

1/ A copy of the Commission's notice of this investigation and conference is presented in app. A. The Department of Commerce's notice of the initiation of its antidumping investigation is presented in app. B.

2/ A copy of the calender of the public conference is presented in app. CA-1

Aqueous solutions of sorbitol are usually sold as a USP grade, although technical grades are available. The standard USP sorbitol solution, commonly referred to as liquid sorbitol, contains 69 to 71 percent solids in a water solution and must constitute at least 64 percent of the solution with other polyhydric alcohols and invert sugars constituting most of the remaining solids. USP sorbitol solutions are primarily used in toothpastes, cosmetics, foods, pharmaceuticals, and industrial surfactants.

Technical grades of sorbitol, usually containing more invert sugar or other polyhydric alcohols than permitted by USP specifications, are used in industrial surfactants, plastics, and other miscellaneous applications.

The product imported from France

Both the crystalline and 70-percent solution of sorbitol are imported from France. There are, however, no known imports of any technical grades of sorbitol.

Uses

Although sorbitol is only 60 to 70 percent as sweet as sugar, it is often used as a sugar substitute. Unlike sugar, sorbitol is digested without the use of insulin. Sorbitol can thus be used in diabetic foods and candies. It is generally believed that sorbitol, which resists fermentation in the oral cavity, does not increase the incidence of dental decay. This anticariogenic property makes sorbitol advantageous for use in sugarless confections. These products may consist of up to 75 or 98 percent of sorbitol for gum and candy respectively. Sorbitol also has a slight cooling effect in the mouth (resulting from its negative heat of solution). This effectively enhances the flavor and also contributes to its popularity as a sugar substitute. Sorbitol also reduces the undesirable aftertaste of saccharin and other artificial sweeteners in such foods as diet sodas and canned fruits.

Sorbitol's chemical structure also gives it valuable properties. The presence of the many hydroxyl groups gives sorbitol a great capacity for hydrogen bonding (i.e., it tends to hold onto hydrogen-containing molecules like water and alcohols). This property makes sorbitol useful as a humectant, stabilizer, and emulsifier.

Sorbitol's anticariogenic and humectant properties, as well as its cool, sweet taste have increased its popularity in the toothpaste market, where it has largely replaced glycerine. The cosmetic industry uses sorbitol and sorbitol-derived esters for their humectant, emulsifying, emollient, and foaming characteristics. In pharmaceuticals, sorbitol and its derivatives are used as stabilizers, humectants, antiflocculating agents and as a carrying vehicle. Most of the sorbitol used in dental hygiene products, cosmetics, and pharmaceuticals is in a 70-percent USP solution, although some USP crystalline grade is also consumed.

Sorbitol derivatives, usually esters, are used as surfactants because of such properties as emulsification and wetting. Softeners, detergents, and dry-

cleaning formulations for textiles constitute large uses of industrial surfactants. Others include corrosion inhibitors, paints, and lubricants. Both 70-percent USP grade and technical grade solutions are used in industrial surfactants. Sorbitol is also used in such miscellaneous applications as flexible glues, tobacco humectants, and pet foods.

Sorbitol is both produced and consumed in the production of vitamin C. The production of vitamin C from dextrose is a continuous process in which sorbitol is produced in an intermediate stage, but is never isolated.

All domestic producers obtain sorbitol from the hydrogenation of dextrose--corn sugar. The dextrose is dissolved in water to a 50 percent solution, and a catalyst is added. The dextrose solution is then heated and pumped into an autoclave where hydrogen is added under pressure. The resulting sorbitol solution is then purified and evaporated to elevate the sorbitol content from 50 to 70 percent. The 70-percent solution may be further concentrated to obtain crystalline sorbitol.

Some producers use a batch process, whereas others use a semicontinuous process--continuous from the autoclave on. Others use a fully continuous process. One U.S. producer also produces sorbitol as a byproduct in its production of mannitol, another hexol. However, the sorbitol produced in this manner is not USP grade.

Sorbitol production is capital intensive, requiring considerable outlay for the plant and equipment. In addition to the autoclave, mixers, and evaporators, it is necessary to provide for the hydrogen used in the production process (this is usually produced on site), regeneration of the catalyst, and storage and transportation of the raw and finished materials.

U.S. tariff treatment

Sorbitol is classified under item 493.6820 of the Tariff Schedules of the United States Annotated. 1/ The column 1 (most-favored-nation) rate of duty for sorbitol is 9 percent ad valorem. 2/ This rate became effective on January 1, 1981, and is the second stage in a series of progressive duty reductions effective on January 1 of each year. These duty reductions will occur each year until 1987, when the final rate of 5.8 percent ad valorem will be reached. These annual duty reductions were the result of concessions granted in the Tokyo round of Multilateral Trade Negotiations (MTN). From January 1, 1972, to December 31, 1979, the column 1 rate of duty for sorbitol was 10 percent ad valorem and represented the final stage of reductions granted in the Kennedy round of trade negotiations.

1/ Prior to Jan. 1, 1974, sorbitol was classified under TSUS item 493.68--other polysaccharides, rare saccharides, and their polyhydric alcohols.

2/ The column 1 rates are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUS. However, such rates would not apply to products of developing countries which are granted preferential tariff treatment under the Generalized System of Preferences (GSP) or under the rate for least developed developing countries (LDDC).

The column 2 rate of duty for sorbitol is 50 percent ad valorem. ^{1/} Imports of sorbitol from certain designated developing countries are eligible for duty-free treatment under the GSP. ^{2/} Sorbitol imports from LDDC countries are dutiable at 5.8 percent ad valorem ^{3/} unless they are eligible for duty-free treatment under the GSP.

Nature and Extent of Alleged Sales at Less Than Fair Value

All known U.S. imports of sorbitol from France are accounted for by the exports of Roquette Freres SA. The petition alleges that LTFV sales of sorbitol from France have been responsible for the increasing market penetration of this product in 1980 and January-March 1981.

To substantiate this claim, the petition presents data comparing the weighted average price of sorbitol to several U.S. purchasers (less all freight, insurance, duties, and wharfage fees) with ex-factory prices quoted by Roquette to purchaser(s) in France. Comparisons were made for both liquid sorbitol (the 70-percent solution) and crystalline sorbitol. These comparisons resulted in the alleged LTFV margins of 28.8 and 35.1 percent for liquid and crystalline sorbitol, respectively.

U.S. Market and Channels of Distribution

The United States is the largest single market for sorbitol. U.S. consumption of sorbitol can be broken down by the following end-use categories:

<u>End use</u>	<u>Percentage distribution of U.S. consumption ^{1/}</u>
Confections and foods-----	29
Toothpaste, toiletries, and cosmetics-----	24
Ascorbic acid-----	20
Miscellaneous-----	27
	<u>100</u>

^{1/} Compiled from "Chemical Profile," Chemical Marketing Reporter, June 22, 1981.

^{1/} The rates of duty in column 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUS.

^{2/} The Generalized System of Preferences, under title V of the Trade Act of 1974, provides duty-free treatment of specified eligible articles imported directly from designated beneficiary developing countries. GSP, implemented by Executive Order No. 11888 of Nov. 24, 1975, as amended, applies to merchandise imported on or after Jan. 1, 1976, and is expected to remain in effect until Jan. 4, 1985.

^{3/} The LDDC rate is a preferential rate (reflecting the full U.S. MTN concession rate for a particular item without staging) and is applicable to products of the least developed developing countries designated in general headnote 3(d) of the TSUS which are not granted duty-free treatment under the GSP.

The sugarless gum market is currently the largest market for sorbitol in the foods category. However, the market for sugarless mints is expected to grow at the most rapid rate. In other food applications, much smaller concentrations of sorbitol are required.

Toothpaste is the second major market for sorbitol. Toothpaste producers use sorbitol in concentrations of 30 to 50 percent. Only relatively small amounts of sorbitol and some sorbitol derivatives are used in other toiletries and cosmetics.

Currently, vitamin C (ascorbic acid) is manufactured by only two companies in the United States. In both cases, the vitamin C is made from sorbitol which is produced inhouse. Thus, sorbitol is not sold as an intermediate for vitamin C production.

Apparent U.S. consumption of sorbitol grew at an average annual rate of 14 percent from 1970 to 1980, spurred on by the increasing production of vitamin C and the increasing use of sorbitol in toothpaste formulations. However, industry sources now predict that growth in the sorbitol market will decelerate in the coming years, averaging only 3 to 5 percent annually.

The demand for sorbitol is largely a function of its unique combination of properties--the sweet, cool taste, the anticariogenic effect, and its hydrogen-bonding capability. Thus, the demand is relatively insensitive to changes in the price of sorbitol. However, the demand for sorbitol does tend to decline in recessionary periods. This is primarily due to declines in the sale of candy and chewing gum, products which are purchased with discretionary income.

The sorbitol market consists of a relatively small number of major end users. It has been estimated that roughly 80 percent of the sorbitol is purchased by only 20 percent of the major customers. Thus, U.S producers are able to concentrate their sales efforts at these large accounts. U.S. producers sell roughly 90 percent of their sorbitol directly to end users. Distributors or dealers are used to service small-volume purchasers.

The larger producers of toothpaste and sugarless confections may negotiate contracts for the purchase of sorbitol. Typically, these contracts are simply a way of guaranteeing a certain supply of sorbitol. They are negotiated annually and specify quantities, as well as dates of delivery. Prices are, however, subject to announced change. These announcements may be made quarterly or even monthly.

For the most part, U.S. importers of sorbitol are chemical dealers that sell virtually all of their material to end users. These importers can compete for the same business as U.S. producers. However, toothpaste producers reportedly have stringent specifications for their sorbitol and may purchase 20 million pounds annually. These requirements (tough specifications and extremely large quantities) have supposedly made it difficult for importers to guarantee supply. U.S. producers have stated that there has been minimal competition from imports at the large-volume accounts of toothpaste producers.

Because sorbitol is essentially a fungible product (i.e., one producer's is virtually the same as another's), and because the number of major end users is relatively small, the need for marketing, sales, and service personnel is limited. But although advertising costs are minimal, U.S. producers and some importers provide technical service and assist in developing new product formulations for customers and potential customers.

The Domestic Industry

U.S. producers

The vast majority of sorbitol production in the United States is controlled by large, multinational chemical companies. There are six U.S. producers of sorbitol--Hoffman-LaRoche & Co., Inc.; ICI Americas Inc. (ICI); Pfizer Inc.; Lonza Inc.; Merck & Co., Inc.; and Ethichem Corp. However, Hoffman-LaRoche, a subsidiary of Hoffmann-LaRoche Co. AG in Switzerland (the world's largest producer of vitamins) produces sorbitol solely as an intermediate for its production of vitamin C. At no time is the sorbitol isolated or available in a marketable form. Therefore, Hoffman-LaRoche will not be included in the domestic sorbitol industry in this report.

The largest U.S. producer of sorbitol is ICI. Originally, this company was part of the Dupont Corp., but was split off into Atlas Chemical Industries, Inc., in 1914 as a result of antitrust litigation. Sorbitol was first produced by Atlas in 1932 and was obtained as a byproduct in the production of mannitol. Atlas also held the original patent on the direct production of sorbitol from the hydrogenation of dextrose. Atlas was acquired by Imperial Chemical Industries, Ltd., the largest chemical firm in the United Kingdom, in 1971. ICI still produces sorbitol from two separate processes. However, the relatively small amount of sorbitol obtained as a byproduct in the production of mannitol is not USP grade and is generally blended into ICI's industrial grades of sorbitol. * * *.

ICI produces three types of sorbitol--the industrial grades, the 70-percent USP solution, and the crystalline. ICI also produces various polyols and their derivatives at the plant in Delaware. Sorbitol accounts for roughly * * * percent of the plant's output. The plant has been in existence since 1932, however, the equipment has been continually updated. The average age of the equipment is probably about * * * years. The production process for liquid sorbitol is continuous. The latest plant improvement was the installation of a new "crystalline plant" in 1979. In this miniplant, * * *. The crystalline plant is dedicated exclusively to sorbitol, but the rest of the equipment is used to produce a variety of polyols. * * *.

The second largest domestic producer is the petitioner, Pfizer Inc. Pfizer is a publicly owned corporation that was founded in 1899. It is primarily a manufacturer of prescription drugs and is the second largest producer of antibiotics in the world. Basically, Pfizer produces only two grades of sorbitol in its New Jersey plant--the 70-percent USP solution and

the crystalline. However, the firm also produces what they call a reduced color grade of sorbitol, which is the 70-percent solution with extra decolorization. Pfizer also occasionally produces vitamin C from its sorbitol. However, when vitamin C is produced, the sorbitol is not isolated, but rather diverted at an intermediate stage in the production process and then processed further.

Pfizer began producing sorbitol in the late 1950's, but has continually upgraded the equipment and expanded the plant's capacity. The production process is batch-continuous and the equipment is dedicated to sorbitol. * * *. The plant also produces bulk pharmaceutical chemicals and various vitamins.

The third largest producer is Lonza, a wholly owned subsidiary of Lonza AG of Switzerland which is, in turn, owned by Schweizerische Aluminum AG. The sorbitol plant, which produces only liquid sorbitol, originally belonged to Baird Chemical Industries, Inc. and was constructed in 1964. Lonza acquired Baird Chemical in 1969 and decided to expand the plant in 1974. Construction was started in 1975 and by 1977, a substantial portion of the equipment was functional. By 1980, the rest of the equipment had been installed. Lonza's production process is continuous and the equipment is dedicated to sorbitol, which is, in fact, the sole product of the plant.

The fourth largest U.S. producer of sorbitol is Merck & Co., Inc. Merck is the world's largest producer of prescription drugs. The firm was originally founded in 1668 in Darmstadt, West Germany. The U.S. branch was established in 1899 and became a publicly owned corporation in 1919. Production of sorbitol began at the Danville, Pa. plant in the 1950's. The sorbitol produced was originally used in the manufacture of vitamin C, but has not been used for that purpose since 1976. Merck primarily produces the 70-percent USP grade of sorbitol. * * *. The equipment used to produce the sorbitol is dedicated to that purpose and runs on a batch basis. Although some of the equipment dates back to the 1950's, most of it has been replaced over the years. A variety of medicinals and fine chemicals are also produced at the plant.

Ethichem, the smallest U.S. producer, is located in Carlstadt, N.J. Ethichem holds the patent on the use of sorbitol in frankfurters and was using certain amounts of sorbitol internally, as well as acting as a distributor for other purchasers prior to 1974. However, when the price of sorbitol increased sharply in 1974, Ethichem decided it would produce its own sorbitol. New equipment was purchased and installed. Production began in July 1976. The equipment is dedicated to the production of liquid sorbitol and operates on a batch basis. The plant also turns out vegetable oil products and surface-active agents for the foods industry.

U.S. importers

U.S. importers of sorbitol are generally chemical dealers or distributors. However, several importers manufacture products such as sorbitol-based polyethers and sugarless mints containing sorbitol. The Commission obtained data on sorbitol imports from 14 companies. Together, these firms accounted for an average of 80 percent of total U.S. imports of

sorbitol and virtually all imports of sorbitol from France during the period under consideration (table 1).

Gallard-Schlesinger was the exclusive dealer for Roquette Frere's sorbitol for more than 10 years. However, the firm's relationship with Roquette changed in August 1980, and Gallard-Schlesinger ceased to be the importer of record for sorbitol in October 1980. Since August, the responsibility for importing sorbitol has been shifted to Roquette Freres' U.S. subsidiary, Roquette Corp., in New York City.

Gallard-Schlesinger is a chemical dealer that handles pharmaceuticals, health foods, intermediate chemicals, and research chemicals in addition to sorbitol. The sales staff actively solicits sales from all significant sorbitol purchasers. A company official estimated that about * * * percent its sorbitol was imported to fulfill sales already negotiated (i.e., the material was already sold when it arrived). The remaining * * * percent stored in warehouses and sold to small-volume purchasers.

Roquette Corp. was established in 1979 and has stated that it will start construction on a sorbitol plant to be located in Gurnee, Ill., later this year. The plant is expected to take 12 to 18 months to complete and will produce both liquid and crystalline sorbitol. The plant is to utilize the parent company's production technology and will produce sorbitol directly from corn through a longer, more involved, and completely continuous process. Company officials have stated that Roquette Corp. was established primarily to oversee the construction of the sorbitol plant and eventually to run the plant. The importation of sorbitol was undertaken to allow Roquette direct control over its market share and to establish its presence directly in the U.S. market.

Foreign Producers

Sorbitol is produced in many countries--France, Finland, Italy, Czechoslovakia, Russia, India, Japan, and the Republic of Korea, to name a few. The foreign countries with the largest capacity are France, West Germany, and Japan. There are reportedly three producers of sorbitol in France. However, Roquette Freres SA is the only company known to export its product to the United States. Roquette Freres has produced sorbitol since the 1960's and is the largest sorbitol producer in the world. Roquette is also the largest corn wet-miller in Europe and obtains sorbitol from an intricate and fully integrated production process directly from corn. Roquette is a family-controlled corporation. The Roquette family owns 75 percent of the stock and Rhone-Poulenc owns the remainder.

The Question of Injury or the Likelihood Thereof

U.S. production, capacity, and capacity utilization

U.S. production of all isolated sorbitol, as reported to the Commission, declined steadily during the period under consideration (table 2). It declined from 163 million pounds in 1978 to 133 million pounds in 1980, or by

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

Note.--Because of rounding, figures may not add to the totals shown.

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

Table 2.--Sorbitol: U.S. production, by types and by firms, 1978-80, January-May 1980, and January-May 1981

Item and firm	1978	1979	1980	January-May--		1978	1979	1980	January-May--	
				1980	1981				1980	1981
	Quantity (1,000 pounds)			Percentage distribution of quantity						
70-percent solution:										
ICI-----	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***
Lonza-----	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***
Ethichem-----	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***
Crystalline:										
ICI-----	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***
All other:										
ICI-----	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***
Total: 1/	***	***	***	***	***	***	***	***	***	***
ICI-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0
Pfizer-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0
Lonza-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0
Merck-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0
Ethichem-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0
Total-----	163,471	159,242	132,900	63,433	59,145	100.0	100.0	100.0	100.0	100.0
1/ Reported on a dry-weight basis.										

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

Note.--Because of rounding, figures may not add to the totals shown.

19 percent. U.S. production then declined again, by an additional 7 percent, in January-May 1981 from the level reported for the corresponding period of 1980.

Total sorbitol production consists of the production of crystalline sorbitol, 70-percent USP sorbitol solution, and various technical grades of sorbitol. From 1978 to 1980, the composition of U.S. sorbitol production remained fairly stable. Production of crystalline sorbitol declined slightly, from * * * percent of U.S. production in 1978 to * * * percent in 1980. The standard sorbitol solution accounted for between * * * percent during the period. The technical grades increased from * * * percent of production from 1978 to 1980. However, in January-May 1981, the composition shifted. The share of U.S. production accounted for by crystalline sorbitol declined to * * * percent, while that accounted for by the USP solution declined to * * * percent. On the other hand, the share of U.S. production accounted for by the technical grades jumped to * * * percent.

In contrast to U.S. production, the capacity of domestic firms to produce sorbitol has increased regularly during the period under consideration (table 3). U.S. capacity increased from 227 million pounds in 1978 to 254 million pounds in 1980, or by 11 percent. U.S. capacity then increased by another 6 percent in January-May 1981 over that reported for the corresponding period of 1980.

There has been a steady and significant decline in U.S. producers' capacity utilization. This decline resulted, in part, from the increase in U.S. capacity, but was also exacerbated by the decline in U.S. production of sorbitol. The capacity utilization of the domestic industry declined from 72 percent in 1978 to 52 percent in 1980 and then declined again, to 51 percent in January-May 1981. In a capital-intensive industry, this low capacity utilization figure indicates declining production efficiencies and, thus, increasing unit production costs.

U.S. producers' commercial shipments

U.S. producers' commercial shipments of sorbitol declined from 1978 to 1980, and have remained at the same level in 1981 (table 4). Total commercial shipments declined from 145 million pounds in 1978 to 122 million pounds in 1980, or by 16 percent. However, virtually all of that decline occurred from 1979 to 1980. U.S. producers' shipments increased in January-May 1981 over those of the corresponding period of 1980, but by less than 1 percent.

With respect to the various types of sorbitol, the composition of U.S. producers' commercial shipments has changed only slightly during the period under consideration. U.S. producers' commercial shipments of 70-percent sorbitol have varied from * * * percent as a share of total shipments. U.S. producers' commercial shipments of crystalline sorbitol, on the other hand, have declined as a percentage of total commercial shipments. They declined from * * * percent in 1978 to * * * percent in January-May 1981. U.S. producers' commercial shipments of the technical grades of sorbitol increased from * * * percent to * * * percent of total commercial shipments from 1978 to January-May 1981.

Table 3.--Sorbitol: U.S. production, production capacity, and capacity utilization, by firms, 1978-80, January-May 1980, and January-May 1981

Item and firm	1978	1979	1980	January-May--	
				1980	1981
Production: 1/					
ICI-----1,000 pounds--	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	163,471	159,242	132,900	63,433	59,145
Capacity: 1/ 2/					
ICI-----do-----	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	226,930	228,930	255,230	108,921	116,471
Capacity utilization:					
ICI-----Percent--	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	72.0	69.6	52.1	58.2	50.8

1/ Reported on a dry-weight basis.

2/ Capacity is defined as the normal sustained production that can be achieved on an annual basis, making allowance for anticipated maintenance and downtime. Capacity is based on 24 hours-a-day operation, 7 days a week, and on the product mix in 1980.

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

Table 4.--Sorbitol: U.S. producers' commercial shipments, by types and by firms, 1978-80, January-May 1980, and January-May 1981

Item and firm	1978	1979	1980	January-May--		1978	1979	1980	January-May--		
				1980	1981				1980	1981	
Quantity (1,000 pounds)											
Percent of total quantity											
70-percent solution:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***	***
Lonza-----	***	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***	***
Ethichem-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
Crystalline:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
All other:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
Total: 1/	145,004	143,404	122,140	57,616	57,935	100.0	100.0	100.0	100.0	100.0	100.0
ICI-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Pfizer-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Lonza-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Merck-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Ethichem-----	***	***	***	***	***	100.0	100.0	100.0	100.0	100.0	100.0
Total-----	145,004	143,404	122,140	57,616	57,935	100.0	100.0	100.0	100.0	100.0	100.0
Value (1,000 dollars)											
Average unit value (Per pound)											
70-percent solution:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***	***
Lonza-----	***	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***	***
Ethichem-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
Crystalline:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
All other:											
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***	***	***	***	***
Total:	***	***	***	***	***	***	***	***	***	***	***
ICI-----	***	***	***	***	***	***	***	***	***	***	***
Pfizer-----	***	***	***	***	***	***	***	***	***	***	***
Lonza-----	***	***	***	***	***	***	***	***	***	***	***
Merck-----	***	***	***	***	***	***	***	***	***	***	***
Ethichem-----	***	***	***	***	***	***	***	***	***	***	***
Total-----	66,357	70,465	65,899	30,175	34,412	45.8	49.1	54.0	52.4	59.4	59.4

1/ Reported on a dry-weight basis.

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

Note.--Because of rounding, figures may not add to the totals shown.

The apparent increase in the demand for the technical grades of sorbitol may be explained by the increasing cost advantage of the technical grades. The average unit value of the technical grades increased by * * * percent from 1978 to January-May 1981. In contrast, the average unit value of the 70-percent solution increased by 41 percent over the same period.

The relative decline in U.S. producers' commercial shipments of crystalline sorbitol do not appear to be the result of a relative cost disadvantage of the product. On the contrary, the average unit value of the crystalline product increased by only * * * percent from 1978 to January-May 1981, which is only about half the increase for the 70-percent solution and * * * that for the technical grades of sorbitol.

U.S. producers' exports of sorbitol were significant in 1978, but have declined sharply since then. U.S. producers' exports of sorbitol, as well as the ratio of such exports to U.S. producers' total commercial shipments are given in the following tabulation on a dry-weight basis:

<u>Period</u>	<u>Exports</u> (1,000 pounds)	<u>Ratio of exports to</u> <u>commercial shipments</u> (Percent)
1978-----	***	***
1979-----	***	***
1980-----	***	***
January-May--		
1980-----	***	***
1981-----	***	***

U.S. producers' exports of sorbitol declined by 73 percent from 1978 to 1980 and then declined by another 81 percent in January-May 1981 over exports for the corresponding period of 1980. As a share of U.S. producers' commercial shipments, exports declined from * * * percent in 1978 to * * * percent in January-May 1981. U.S. producers' exports of the standard sorbitol solution accounted for more than 85 percent of all U.S. producers' exports of sorbitol during the period under consideration.

Inventories

U.S. producers' inventories of sorbitol have remained fairly stable during the period under consideration (table 5). Inventories of all types of sorbitol held as of December 31 increased by only 3.5 percent from 1978 to 1979 and then declined by 2.4 percent in 1980. Inventories held as of May 31 declined by 3.0 percent from 1980 to 1981. These declines in inventories may be the result of increased costs, in the form of the prevailing high interest rates, of retaining finished goods in inventory.

As a share of commercial shipments made during the previous period, U.S. producers' inventories increased slightly from 1978 to 1980, but then declined slightly in 1981. As a share of sales made during the preceeding year, year-

Table 5.--Sorbitol: U.S. producers' inventories, by types and by firms, as of Dec. 31 of 1978-80, May 31, 1980, and May 31, 1981

Item, type, and firm	As of Dec. 31--			As of May 31--	
	1978	1979	1980	1980	1981
Inventories:					
Of 70-percent solution:					
ICI-----1,000 pounds--	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Of crystalline:					
ICI-----do-----	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Of all other:					
ICI-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Total: 1/					
ICI-----do-----	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	18,165	18,794	18,348	21,004	20,376
Ratio of inventories to sales					
70-percent solution:					
ICI-----Percent--	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Crystalline:					
ICI-----do-----	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
All other:					
ICI-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Total: 1/					
ICI-----do-----	***	***	***	***	***
Pfizer-----do-----	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Merck-----do-----	***	***	***	***	***
Ethichem-----do-----	***	***	***	***	***
Total-----do-----	12.5	13.1	15.0	36.5	35.2

1/ Reported on a dry-weight basis.

2/ Merck did not produce any technical-grade sorbitol in 1978 or 1979.

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

end inventories of sorbitol increased from 12.5 percent in 1978 to 15 percent in 1980. As a share of sales made during January-May, inventories held as of May 31 declined from 36.5 percent in 1980 to 35.2 percent in 1981.

U.S. producers' inventories of both crystalline sorbitol and the 70-percent solution declined during the period under consideration. Yearend inventories of crystalline sorbitol declined from * * * pounds in 1978 to * * * pounds in 1980. Inventories held as of May 31 also declined from 1981 to 1980. Yearend inventories of the 70-percent solution declined from * * * pounds in 1978 to * * * pounds in 1980. Inventories held as of May 31, 1981, remained at * * * pounds. This figure is, however, markedly lower than that for inventories held as of the corresponding date of 1980. As was previously stated, these declines in inventories may be the result of the increasing costs of retaining finished goods.

As a share of annual sales, yearend inventories of crystalline sorbitol and the 70-percent solution did not change significantly from 1978 to 1980. However, as a share of sales made during January-May, inventories held as of May 31, 1981, declined markedly relative to the same figure for the corresponding period of 1980. The ratio for crystalline soribitol declined from * * * percent in January-May 1980 to * * * percent for the corresponding period of 1980. The share for liquid sorbitol declined from * * * percent in January-May 1980 to * * * percent for the corresponding period of 1981.

* * * * *

Generally, U.S. importers of sorbitol do not maintain inventories of sorbitol. Typically, the merchandise is sold before it arrives and is routed directly to the purchaser or the material is used by the importer as it comes in. However, three importers did report end-of-period inventories. The inventories reported were of sorbitol imported from countries other than France and are tabulated below on a dry-weight basis along with the ratio of inventories to sales for the three importers:

<u>Period</u>	<u>Inventories</u> <u>(1,000 pounds)</u>	<u>Ratio of inventories</u> <u>to sales of imported material</u> <u>(Percent)</u>
As of Dec. 31--		
1978-----	***	***
1979-----	***	***
1980-----	***	***
As of May 31--		
1980-----	***	***
1981-----	***	***

Quantitatively, inventories held as of December 31 more than tripled, increasing from * * * in 1978 to * * * in 1980. However, the ratio of these inventories to sales of the imported sorbitol barely increased from 1978 to 1980. Inventories held as of May 31 declined both quantitatively and relative to importers' sales from 1980 to 1981. Quantitatively, these inventories declined from * * * in 1980 to * * * in 1981, or by * * * percent. As a share of sales, these inventories declined from * * * percent in 1980 to * * * percent in 1981.

Apparent U.S. consumption

Apparent U.S. consumption of sorbitol, including captive consumption, increased slightly from 1978 to 1979, but has declined since then (table 6). Apparent consumption increased from 153 million pounds in 1978 to 157 million pounds in 1979, or by 3 percent, but then declined to 143 million pounds in 1980, or by 9 percent. Apparent consumption declined again in January-May 1981 compared with consumption in the corresponding period of 1980.

Captive consumption of sorbitol is becoming less significant for the domestic industry, declining throughout the period under consideration. It accounted for 12 percent of apparent U.S. consumption in 1978, 7 percent in 1980, and only 2 percent in January-May 1981.

Apparent U.S. open-market consumption of sorbitol, which is based on U.S. producers' commercial shipments, followed a see-saw pattern. It increased from 1978 to 1979, declined in 1980, and then increased again in 1981 (table 7). Apparent open-market consumption increased from 135 million pounds in 1978 to 142 million pounds in 1979, or by 5 percent, but then declined to 132 million pounds in 1980, or by 7 percent. It then increased by 8 percent in January-May 1981 over that for the corresponding period of 1980.

U.S. employment and wages

Data on employment and wages in the domestic industry producing sorbitol were available only for Pfizer and Lonza. Pfizer produces both the crystal-line sorbitol and the 70-percent solution. Lonza produces only the standard solution. Neither produce a technical grade of sorbitol. However, their combined data account for an average of * * * percent of U.S. production of sorbitol and * * * percent of U.S. producers' commercial shipments during the period under consideration. The data on employment and wages for these two producers generally show declining trends (table 8).

The average number of all persons employed at Pfizer and Lonza * * * .

The average number of all production and related workers producing sorbitol * * * .

Table 6.--Sorbitol: U.S. production, imports for consumption, net change in inventories, exports, and apparent consumption, 1978-80, January-May 1980, and January-May 1981

(In thousands of pounds)						
Period	Production	Imports	Net change in inven- tories	Exports	Apparent consumption	
1978-----	163,471	7,723	***	***	153,222	
1979-----	159,242	10,014	***	***	157,399	
1980-----	132,900	14,361	***	***	142,637	
January-May--						
1980-----	63,433	4,954	***	***	61,891	
1981-----	59,145	4,903	***	***	61,503	

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

Table 7.--Sorbitol: U.S. producers' open-market shipments, imports for consumption, net change in inventories, exports, and apparent open-market consumption, 1978-80, January-May 1980, and January-May 1981

(In thousands of pounds)						
Period	U.S. producers' open-market shipments	Imports	Net change in inven- tories	Exports	Apparent open-market consumption	
1978-----	145,004	7,723	***	***	134,755	
1979-----	143,404	10,014	***	***	141,561	
1980-----	122,140	14,361	***	***	131,877	
January-May--						
1980-----	57,616	4,954	***	***	56,074	
1981-----	57,935	4,903	***	***	60,293	

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

Table 8.--Average number of employees, total and production and related workers engaged in the manufacture of sorbitol, and wages paid to and hours worked by production and related workers producing sorbitol, by firms, 1978-80, January-May 1980, and January-May 1981

Firm	1978	1979	1980	January-May--	
				1980	1981
Average number of all employees:					
Pfizer-----	***	***	***	***	***
Lonza-----	***	***	***	***	***
Total-----	***	***	***	***	***
Production and related workers producing sorbitol:					
Pfizer-----	***	***	***	***	***
Lonza-----	***	***	***	***	***
Total-----	***	***	***	***	***
Wages paid to production and related workers producing sorbitol:					
Pfizer-----1,000 dollars--	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Hours worked by production and related workers producing sorbitol:					
Pfizer-----1,000 hours--	***	***	***	***	***
Lonza-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***

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

* * * * *

Wages paid to all production and related workers producing sorbitol * * *.

Financial performances of U.S. producers

Data on U.S. producers' profit-and-loss experience on sorbitol were available only for Pfizer and Lonza. These data show that despite an increase in net sales of sorbitol, these two producers' profitability on their sorbitol operations has declined since 1978 (table 9), * * *.

The net sales of these two producers * * *. In contrast, the cost of goods sold * * *. The gross profit * * *.

General, selling, and administrative expenses * * *.

The resulting net operating profit of these two producers * * *. The ratio of the net operating profit to net sales * * *. The ratio of net operating profit to net sales for U.S. producers of industrial organic chemicals with operating assets of \$10 to \$50 million was 8.0 percent in 1979. ^{1/} However, sorbitol is considered a specialty chemical, and the rate of return on specialty chemicals is generally higher than that on industrial chemicals.

For the purposes of this report, cash flow from operations is defined as the net operating profit plus depreciation and amortization expenses. The cash flow from these two producers' operations on sorbitol * * *.

Table 9.--Profit-and-loss experience of selected U.S. producers of sorbitol on their sorbitol operations, by firms, 1978-80

Year and firm	Net sales	Cost of goods sold	Gross profit	General, selling, and administrative expenses	Net operating profit	Ratio of net operating profit to net sales	Ratio of cost of goods sold to net sales
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	Percent	Percent
1978:							
Pfizer	***	***	***	***	***	***	***
Lonza	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***
1979:							
Pfizer	***	***	***	***	***	***	***
Lonza	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***
1980:							
Pfizer	***	***	***	***	***	***	***
Lonza	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***
Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.							

Table 10.--U.S. producers' cash flow from operations on sorbitol,
by selected firms, 1978-80

(In thousands of dollars)				
Firm	1978	1979	1980	
Pfizer-----	***	***	***	***
Lonza-----	***	***	***	***
Total-----	***	***	***	***

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

The Question of the Causal Relationship Between Alleged LTFV Imports from France and the Alleged Injury

U.S. imports and market penetration of alleged LTFV imports

The official statistics of the Department of Commerce are presented in table 11. The problem with these figures is that they are reported to Commerce on a per-pound basis. Thus, a pound of 70-percent solution is reported the same as a pound of the crystalline material. The statistics are, therefore, not compatible with the data presented in the preceding sections of the report, since these are all on a dry-weight basis. Therefore, for the purposes of this report, the data on imports supplied by those U.S. importers who responded to the Commission's questionnaire will be relied on.

The data collected by the Commission account for all U.S. imports from France and an average of 80 percent of total U.S. imports (on a dry-weight basis). The data on imports by selected U.S. importers are presented in tables 1 and 12.

U.S. imports of all sorbitol, as reported to the Commission, increased from 1978 to 1980, but declined slightly in 1981 (table 1). Imports nearly doubled, increasing from 7.7 million pounds in 1978 to 14.4 million in 1980 and declined by 1 percent in January-May 1981 compared with those reported for the corresponding period of 1980.

Imports of sorbitol from France have increased steadily during the period under consideration. Imports from France nearly doubled, increasing from * * * pounds, and accounting for * * * percent of all U.S. imports, in 1978 to * * * pounds, accounting for * * * percent of all imports, in 1980. In January-May 1981, imports from France increased by another 59 percent over the quantity imported during the corresponding period of 1981. Simultaneously, imports from all other sources declined, so that France's share of U.S. imports increased to * * * percent.

* * * * *

Table 11.-- Sorbitol: U.S. imports for consumption, by sources, 1978-80, January-May 1980, and January-May 1981

Source	1978	January-May--		1978	1979	1980	January-May--			
		1979	1980				1980	1981		
		1980	1981				1980	1981		
Quantity (1,000 pounds)		Percentage of total quantity								
France	4,494	6,493	11,986	3,517	5,748	33.4	36.6	52.4	46.1	57.4
West Germany	1,169	2,783	3,848	912	1,500	8.7	15.7	16.8	12.0	15.0
Mexico	1,605	2,874	2,603	953	1,452	11.9	16.2	11.4	12.5	14.5
Japan	1,740	1,976	1,524	850	136	12.9	11.1	6.7	11.1	1.4
Republic of Korea	2,396	2,251	1,359	484	451	17.8	12.7	5.9	6.3	4.5
All other	1,879	774	1,157	823	386	1.4	4.4	5.1	10.8	3.9
Total	13,465	17,748	22,892	7,626	10,018	100.0	100.0	100.0	100.0	100.0
Value 1/ (1,000 dollars)		Average unit value (Per 100 pounds)								
France	1,032	1,600	3,097	565	1,923	\$23.0	\$24.6	\$25.4	\$16.1	\$33.5
West Germany	486	1,294	1,751	498	413	41.6	46.5	45.5	54.6	27.5
Mexico	428	772	765	264	448	26.7	26.9	29.4	27.7	30.8
Japan	312	334	289	152	31	18.0	16.9	19.0	17.8	22.9
Republic of Korea	549	948	323	135	107	22.9	42.1	23.8	27.7	23.8
All other	56	184	275	186	83	30.5	23.8	23.7	22.6	21.5
Total	3,184	5,307	6,644	1,825	3,088	23.6	29.9	29.0	23.9	30.8

1/ Customs import value.

1/ Customs import value.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note:--Because of rounding, figures may not add to the totals shown.

As a share of apparent open-market consumption, total imports of sorbitol increased from 5.7 percent in 1978 to 10.7 percent in 1980, but then declined to 8.6 percent in January-May 1981 (table 12). In contrast, the share of imports from France to apparent open-market consumption has increased steadily during the period under consideration. It increased from * * * percent in 1978 to * * * percent in 1980, and remained about the same in January-May 1981.

Prices

Pricing data were collected by the Commission on sales of both crystalline and liquid sorbitol (the 70-percent USP solution), by quarters, from January 1978 through March 1981, and then for April-May 1981 as well. Pricing data were collected from U.S. producers and the U.S. importers of sorbitol from France on transactions with their three major customers that are end users and with their three major customers that are dealers or distributors. However, the pricing information supplied by the importer on transactions with dealers or distributors was incomplete. So pricing data on transactions with major end users will be the focus of this section.

Both U.S. producers' (ICI and Pfizer) weighted average prices for crystalline sorbitol are presented in table 13. The weighted average price for the industry has increased steadily with the exception of October-December 1980. The weighted average price rose from \$58 per 100 pounds in January-March 1978 to \$71 per 100 pounds in April-May 1981, or by 22 percent. This increase has, however, not been enough to keep pace with the price of dextrose, the principal raw material. The price of dextrose increased by 113 percent from 1978 to 1981, which is more than five times the increase in the weighted average price of U.S. producers' prices for crystalline sorbitol. The price index for all industrial chemicals increased by 53 percent over a similar period.

The weighted average price of sorbitol from France is given in table 14. These data show that the price of the imported material has increased at a faster rate than the price of the domestic material. The weighted average price of crystalline sorbitol from France increased by * * * percent from January-March 1978 to April-May 1981. However, two thirds of that increase occurred from July-September 1980 to April-May 1981.

In comparing the prices reported for the imported material with those for the domestic product, margins of underselling are apparent for 1978, 1979, and January-September 1980. These margins vary from a low of 4.2 percent to a high of 12.7 percent, but appear to be the largest in 1980. No margins of underselling were apparent in 1981. It should, however, be noted that the importers' prices are all reported as delivered prices. Thus, they include the cost of transportation to the purchaser from the port of lading in the United States. However, most purchasers of sorbitol, especially the large-volume customers, are located in the Northeast corridor. Thus, transportation costs are hardly significant to the purchaser and generally add only 1 percent to the price of crystalline sorbitol.

Table 12.--Sorbitol: Imports by selected U.S. importers, by sources, 1978-80, January-May 1980, and January-May 1981

Item	1978	1979	1980	January-May--	
				1980	1981
Imports: <u>1/</u>					
France-----1,000 pounds---	***	***	***	***	***
All other-----do-----	***	***	***	***	***
Total-----do-----	***	***	***	***	***
Ratio of imports to					
apparent open market					
consumption:					
France-----percent--	***	***	***	***	***
All other-----do-----	***	***	***	***	***
Total-----do-----	5.7	7.0	10.7	8.7	8.6

1/ All types of sorbitol are included on a dry-weight basis. This figure has been adjusted to reflect the net change in inventories.

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

Note.--Because of rounding, figures may not add to the totals shown.

Table 13.--Crystalline sorbitol: U.S. producers' weighted average prices to major end users, by firms and by periods, January 1978-May 1981.

(Per 100 pounds)			
Period of shipment	ICI	Pfizer	Weighted average 1/
1978:			
January-March-----	***	***	\$58.00
April-June-----	***	***	58.00
July-September-----	***	***	58.00
October-December-----	***	***	61.00
1979:			
January-March-----	***	***	61.00
April-June-----	***	***	61.00
July-September-----	***	***	61.50
October-December-----	***	***	63.50
1980:			
January-March-----	***	***	64.00
April-June-----	***	***	64.65
July-September-----	***	***	68.76
October-December-----	***	***	67.51
1981:			
January-March-----	***	***	70.30
April-May-----	***	***	71.00

1/ Weighted on the basis of quantities sold.

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

Table 14.--Crystalline sorbitol: Weighted average prices to end users of imported 1/ and domestic merchandise, by periods, January 1978-May 1981

Period	Domestically produced sorbitol	Imported sorbitol from France	Margin of underselling	
			Actual	Percent
	Per 100 pounds	Per 100 pounds		
1978:				
January-March-----	\$58.00	***	***	***
April-June-----	58.00	***	***	***
July-September-----	58.00	***	***	***
October-December-----	61.00	***	***	***
1979:				
January-March-----	61.00	***	***	***
April-June-----	61.00	***	***	***
July-September-----	61.50	***	***	***
October-December-----	63.50	***	***	***
1980:				
January-March-----	64.00	***	***	***
April-June-----	64.65	***	***	***
July-September-----	68.76	***	***	***
October-December-----	67.51	***	***	***
1981:				
January-March-----	70.30	***	***	***
April-May-----	71.00	***	***	***

1/ Prices for the imported merchandise are reported on a delivered basis.

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

The weighted average prices for four domestic producers of liquid sorbitol are presented in table 15. Prices paid for Ethichem's sorbitol to end users were not available, as the firm's major transactions are with dealers and distributors of sorbitol, and only small volumes of sorbitol are sold directly to end users. The quantities delivered in any quarter by each of the four reporting producers varied from * * *, but were typically in the range of * * *.

The weighted average price for these producers increased during the period under consideration. The weighted-average price increased from \$31 per 100 pounds in January-March 1978 to \$41 per 100 pounds in April-May 1981, or by 33 percent. Again, these increases represent less than half the increases in the price of dextrose over the same period.

Table 15.--Liquid sorbitol: U.S. producers' weighted average prices to major end users, by firms and by periods, January 1978-May 1981.

(Per 100 pounds)					
Period of shipment	ICI	Pfizer	Lonza	Merck	Weighted average 1/
1978:					
January-March-----	***	***	***	***	\$31.19
April-June-----	***	***	***	***	31.65
July-September-----	***	***	***	***	31.42
October-December-----	***	***	***	***	33.58
1979:					
January-March-----	***	***	***	***	32.75
April-June-----	***	***	***	***	32.21
July-September-----	***	***	***	***	33.96
October-December-----	***	***	***	***	34.71
1980:					
January-March-----	***	***	***	***	34.50
April-June-----	***	***	***	***	34.50
July-September-----	***	***	***	***	36.59
October-December-----	***	***	***	***	39.51
1981:					
January-March-----	***	***	***	***	40.33
April-May-----	***	***	***	***	41.35

1/ Weighted on the basis of quantities sold.

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

The importers' weighted average price for liquid sorbitol from France is presented in table 16. This price series represents delivered prices on quarterly quantities of about * * * pounds. From January 1978 to September 1980, the weighted average price remained fairly stable, varying by less than \$2 per 100 pounds. However, from July-September 1980 to April-May 1981, the weighted average price rose by * * * percent.

When the weighted average price for the imported material is compared with that for domestically produced material, margins of underselling are evident for the entire period under consideration. The margins vary from a low of 1.3 percent to a high of 21 percent, but generally increased from January 1978 to December 1980. The margins dropped off sharply thereafter. Once again, it must be noted that the prices of the imported product are reported on a delivered basis. Freight charges will generally add 2 percent to the price of liquid sorbitol. Thus, the margins of underselling presented in table 16 are understated by about 2 percentage points.

Table 16.--Liquid sorbitol: Weighted average prices of imported 1/ and domestic merchandise, by periods January 1978-May 1981

Period of shipment	Domestically produced sorbitol	Imported sorbitol from France	Margin of underselling	
			Actual	Percent
	Per 100 pounds	Per 100 pounds		
1978:				
January-March-----	\$31.19	***	***	***
April-June-----	31.65	***	***	***
July-September-----	31.42	***	***	***
October-December-----	33.58	***	***	***
1979:				
January-March-----	32.75	***	***	***
April-June-----	32.21	***	***	***
July-September-----	33.96	***	***	***
October-December-----	34.71	***	***	***
1980:				
January-March-----	34.50	***	***	***
April-June-----	34.50	***	***	***
July-September-----	36.59	***	***	***
October-December-----	39.51	***	***	***
1981:				
January-March-----	40.33	***	***	***
April-May-----	41.35	***	***	***

1/ Prices for the imported merchandise are reported on a delivered basis.

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

Merck's and Lonza's prices for liquid sorbitol to their toothpaste customers are presented separately in table 17. Lonza and Merck are apparently the major suppliers of toothpaste producers, their largest customers. The toothpaste market for sorbitol is unique in that most of the transactions occur under contracts which are negotiated annually. These transactions also

Table 17.--Liquid sorbitol: Merck and Lonza's prices to major toothpaste producers, by periods, January 1978-May 1981.

(Per 100 pounds)			
Period of shipment	Merck	Lonza	Weighted average 1/
1978:			
January-March-----	***	***	\$27.75
April-June-----	***	***	27.75
July-September-----	***	***	27.75
October-December-----	***	***	29.03
1979:			
January-March-----	***	***	29.58
April-June-----	***	***	30.08
July-September-----	***	***	29.55
October-December-----	***	***	30.29
1980:			
January-March-----	***	***	31.41
April-June-----	***	***	31.56
July-September-----	***	***	35.11
October-December-----	***	***	36.07
1981:			
January-March-----	***	***	39.05
April-May-----	***	***	40.27

1/ Weighted on the basis of quantities sold.

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

involve very large volumes of material * * *. Thus, prices for sorbitol to customers in the toothpaste market are typically much lower than those to other customers. Imports have allegedly been unable to penetrate this market significantly because of the very large quantities involved. The Commission's staff has found no indication that imported sorbitol is sold to toothpaste producers in any significant quantities.

The weighted average price of Merck and Lonza to their toothpaste customers has increased more rapidly than the weighted average prices for sorbitol to the other types of customers. The weighted average price increased from \$28 per 100 pounds in January-March 1978 to \$41 per 100 pounds in April-May 1981, or by 45 percent. Thus, prices to toothpaste producers, which were generally 12 or 13 percent lower than the prices to all other types of purchasers in 1978 and 1979, were only 3 percent lower in January-May 1981.

Lost sales

The petitioner, Pfizer Inc., and two other domestic producers, Lonza, Inc., and Merck & Co., Inc., presented information on lost sales to the Commission. Pfizer alleged that it had lost sales of * * * pounds of sorbitol, valued at * * *, to imports from France. Lonza and Merck alleged that they had lost sales of * * * pounds of sorbitol, valued at * * *, and * * * pounds of sorbitol, valued at * * *, respectively, to imports from France. These sales were allegedly lost at 18 firms during January 1978-July 1981.

The Commission's staff was able to contact 15 of the 18 firms where domestic sorbitol sales were allegedly lost. One firm refused to respond to any telephone inquiry. Five firms denied purchasing any sorbitol from France, indicating that they buy either domestic sorbitol, a product imported from sources other than France, or a combination thereof. Nine firms acknowledged purchasing sorbitol from France.

Three of the nine firms accounted for alleged lost sales of * * * pounds of liquid sorbitol, valued at * * *. These firms stated that price was not a consideration in deciding to purchase sorbitol from France. The considerations cited were an alternative source of supply, the higher quality of the imported product, and superior technical service offered by Roquette Corp., the U.S. subsidiary of the French producer.

Six firms stated that price was a consideration in their purchasing decisions. Three firms, accounting for alleged lost sales of * * * pounds of crystalline sorbitol, valued at * * *, and * * * pounds of liquid sorbitol, valued at * * *, during 1980 and 1981 indicated that although price was a consideration in buying sorbitol from France, quality was a more important consideration. These firms use both domestic and imported sorbitol, but company representatives stated that for certain applications, e.g., tableting, they found that the product from France worked better in their formulations. Two of these firms indicated that maintaining an alternative supply source was another reason for using sorbitol from France.

One of the six firms acknowledging price as a consideration in its decision to buy sorbitol from France * * * has stated that there were "special" circumstances involved in their purchasing decision. The firm had an agreement with Roquette Freres to purchase substantial quantities of another commodity. However, the firm wished to withdraw from the agreement. Such a withdrawal entailed the payment of a considerable penalty. Therefore, the firm approached Roquette Freres with a proposition to purchase crystalline sorbitol instead of the other commodity. According to a company official, the sorbitol was offered to them at a price lower than that offered by domestic producers. * * *. Pfizer allegedly lost sales of * * * pounds, valued at * * * in 1980 and * * * pounds, valued at * * *, in January-July 1981 at this firm.

The two remaining firms acknowledging price as a consideration in purchasing liquid sorbitol from France indicated that price was the most important consideration in their purchasing decision. The first firm, accounting for alleged lost sales of * * * pounds, valued at * * *, does not

buy directly from the importer, but from a chemical dealer. The official stated that the sorbitol from France was still obtained at prices 10 to 15 percent below those offered by domestic producers.

A representative of the second firm which indicated that price was the primary consideration stated that quality and maintaining an alternative supply source were secondary considerations. This individual stated that until early 1980, the sorbitol from France was of considerably better quality for his firm's applications. Although the domestic and imported material are now very comparable, he still feels that the product from France may have a slight edge. An additional reason given for buying the sorbitol from France as an alternative source of supply, was to keep pressure on the domestic producers to be more competitive in their pricing policies. The representative estimated that his company purchased * * * pounds of sorbitol from France in 1978, * * * pounds in 1979, and * * * pounds in 1980. No purchase of sorbitol from France has been made thus far in 1981, because the prices for the French material have escalated rapidly. However, he expects to buy some imported sorbitol shortly and expects the price to be comparable with the domestic product. Pfizer allegedly lost sales to this company of * * * pounds, valued at * * *, during May 1980-July 1981. Lonza allegedly lost an additional * * * or * * * pounds of sorbitol valued at * * * to * * * to the same firm.

APPENDIX A.

NOTICE OF COMMISSION'S INVESTIGATION AND CONFERENCE

[Investigation No. 731-TA-44 (Preliminary)]**Sorbitol From France****AGENCY:** International Trade Commission.¹⁰ *Id.* at A-31-A-33.¹¹ H. Rep. No. 96-317, 96th Cong., 1st Sess. 47 (1979).¹² S. Rep. No. 96-249, 96th Cong., 1st Sess. 78 (1979).**ACTION:** Institution of preliminary antidumping investigation.**SUMMARY:** The U.S. International Trade Commission hereby gives notice of the institution of investigation No. 731-TA-44 (Preliminary) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from France of sorbitol, provided for in item 493.68 of the Tariff Schedules of the United States, which is allegedly sold or likely to be sold in the United States at less than fair value (LTFV).**EFFECTIVE DATE:** June 19, 1981.**FOR FURTHER INFORMATION CONTACT:**

Ms. Miriam Bishop, Office of Investigations, U.S. International Trade Commission, Room 350, 701 E Street NW., Washington, D.C. 20436; telephone 202-523-0291.

SUPPLEMENTARY INFORMATION: On June 15, 1981, petitions were simultaneously filed with the U.S. Department of Commerce and the U.S. International Trade Commission by Pfizer Inc. alleging that sorbitol from France is being sold in the United States at LTFV and that an industry in the United States is being materially injured or threatened with material injury by reason of such imports. Accordingly, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)), the Commission is instituting preliminary antidumping investigation No. 731-TA-44 (Preliminary) to determine whether a reasonable indication of such injury exists. The Commission must make its determination within 45 days after the date on which the petition was received, or in this case by July 30, 1981. The investigation will be conducted according to the provisions of part 207, subpart B, of the Commission's Rules of Practice and Procedure (19 CFR Part 207).**Written Submissions:** Any person may submit to the Commission a written statement of information pertinent to the subject of the investigation. A signed original and nineteen (19) true copies of each submission must be filed at the Office of the Secretary, U.S. International Trade Commission Building, 701 E Street, NW., Washington, D.C. 20436, on or before July 16, 1981. All written submissions except for confidential business data will be available for public inspection.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope

and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6).

For further information concerning the conduct of the investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, part 207, subparts A and B (19 CFR Part 207), and part 201, subparts A through E (19 CFR Part 201).

Conference: The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 10 a.m., e.d.t., on Monday, July 13, 1981, at the U.S. International Trade Commission Building. Parties wishing to participate in the conference should contact the investigator for this investigation, Ms. Miriam Bishop (202-523-0291). It is anticipated that parties in support of the petition for the imposition of antidumping duties and parties opposed to such petition will each be collectively allocated one (1) hour within which to make an oral presentation at the conference. Further details concerning the conduct of the conference will be provided by the investigator.**Inspection of the Petition:** The petition filed in this case is available for public inspection at the Office of the Secretary, U.S. International Trade Commission.

This notice is published pursuant to § 207.12 of the Commission's Rules of Practice and Procedure (19 CFR 207.12).

Issued: June 19, 1981.

By order of the Commission.

Kenneth R. Mason,
Secretary.

(FR Doc. 81-15701 Filed 6-23-81; 8:45 am)

BILLING CODE 7020-02-M

APPENDIX B.

DEPARTMENT OF COMMERCE'S NOTICE OF INITIATION OF
ANTIDUMPING INVESTIGATION

International Trade Administration**Initiation of Antidumping Investigation;
Sorbitol From France****AGENCY:** International Trade
Administration, Commerce.**ACTION:** Initiation of Antidumping
Investigation.

SUMMARY: We are initiating an antidumping investigation to determine whether sorbitol from France is being, or is likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission ("ITC") of this action, so that it may preliminarily determine whether these imports are materially injuring or threatening to injure materially a U.S. industry. If both investigations proceed normally, the ITC will announce its preliminary determination by July 30, 1981, and we will announce ours by November 23, 1981.

EFFECTIVE DATE: July 10, 1981.

FOR FURTHER INFORMATION CONTACT:
John Brinkmann, Office of
Investigations, Import Administration,
International Trade Administration, U.S.
Department of Commerce, 14th Street
and Constitution Avenue, N.W.,
Washington, D.C. 20230 (202-377-1279).

SUPPLEMENTARY INFORMATION:**Initiation of Investigation**

On June 15, 1981, we received a petition from counsel for Pfizer, Inc., of New York, New York. Complying with the filing requirements of 19 CFR 353.36, the petition alleges that Societe Roquette Freres of Lille, France, is selling sorbitol in the United States at less than fair value, and that such sales are materially injuring a U.S. industry. Petitioner has cited lost sales, price suppression, and rapid penetration of the U.S. market as examples of injury to the domestic sorbitol industry. The petition also claims "critical circumstances" exist due to a rapid and intensive penetration of the U.S. market by massive imports of this merchandise during a relatively short period.

After conducting a summary review of the petition, as required by section 732(c)(1) of the Tariff Act of 1930, as amended (19 U.S.C. 1673a(c)(1)) ("the Act") we have found that the information it contains reasonably supports the allegations of material injury and of sales at less than fair value and justifies further investigation.

Therefore, in accordance with section 732(c)(2) of the Act, we are initiating an antidumping investigation to determine whether there is a reasonable indication that sorbitol from France is being sold in the United States at less than fair value.

We are publishing this notice in accordance with § 353.37(b) of the Commerce Regulations (19 CFR 353.37(b)). Unless we extend this investigation, we will make our preliminary determination by November 23, 1981.

Scope of the Investigation

Sorbitol is a polyol which is produced by the catalytic hydrogenation of sugars (glucose). It is commercially available in two forms: (1) crystalline sorbitol, used in the production of sugarless gum, candy, groceries and pharmaceuticals; and (2) liquid sorbitol, used in cosmetics and toiletries (such as toothpaste).

Sorbitol is currently classified under item number 493.6820 of the Tariff Schedules of the United States, Annotated.

Critical Circumstances

The petition also alleges that critical circumstances exist within the meaning of section 733(e)(1) of the Act (19 U.S.C. 1673b(e)(1)). In order to determine that critical circumstances exist, the Department must find there is a reasonable basis to believe or suspect that: (1)(a) there is a history of dumping in the United States or elsewhere of the

class or kind of merchandise which is the subject of the investigation; or (b) that the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than fair value; and (2) there have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

Since the petition has failed to provide us with sufficient information which establishes either a prior history of dumping or that the importer knew or should have known the exporter was selling the subject merchandise at less than fair value, we determine that at this time there is not a reasonable basis for concluding that critical circumstances exist with respect to imports of sorbitol from France. Accordingly, we have not addressed the issue of massive imports at this time.

Notification of ITC and Preliminary Determination

Section 732(d) of the Act (19 U.S.C. 1673a) also requires us to notify the ITC of this decision and to provide it with the information we used in making this decision. We will make available to the ITC all nonprivileged and nonconfidential information. We will also allow the ITC access to all privileged and confidential information in our files, provided it confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration.

Pursuant to section 733(a) of the Act (93 Stat. 163, 19 U.S.C. 1673a), the ITC will determine by July 30 whether there is a reasonable indication that an industry in the United States is materially injured, or threatened with material injury, by reason of imports of sorbitol from France. If the ITC makes a negative determination, this investigation will terminate; otherwise, it will proceed to its conclusion.

This notice is published pursuant to section 732 of the Act (93 Stat. 162, 19 U.S.C. 1673(a) and § 353.37(b) of the Department Regulations (19 CFR 353.37(b)).

Gary N. Horlick,
Deputy Assistant Secretary for Import
Administration.

July 6, 1981.

[FR Doc. 81-20307 Filed 7-6-81; 8:48 am]

BILLING CODE 3510-25-M

APPENDIX C.

CALENDER OF PUBLIC CONFERENCE

CALENDAR OF PUBLIC CONFERENCE

Investigation No. 731-TA-44 (Preliminary)

SORBITOL FROM FRANCE

Those listed below appeared as witnesses at the United States International Trade Commission conference held in connection with the subject investigation on Monday, July 13, 1981, in room 117 of the USITC Building, 701 E Street, NW., Washington, D.C.

In support of the petition

Freeman, Meade, Wasserman & Schneider -- Counsel
New York, N.Y.
on behalf of

Pfizer Inc.

Beth C. Ring -- of Counsel
Jack Wasserman -- of Counsel
John E. McVeigh, Senior Vice President
Eileen Walton, Esquire

Lonza Inc.

Irving Gottlieb, Manager, Government Relations
Lauren Dadekian
Susan Stock
Santo Bonanno

In opposition to the petition

Fox, Glynn, and Melamed
New York, N.Y.
on behalf of

Roquette Freres SA

Raymond Steckel -- of Counsel
Joel Durlam, National Economic Research Corp.

