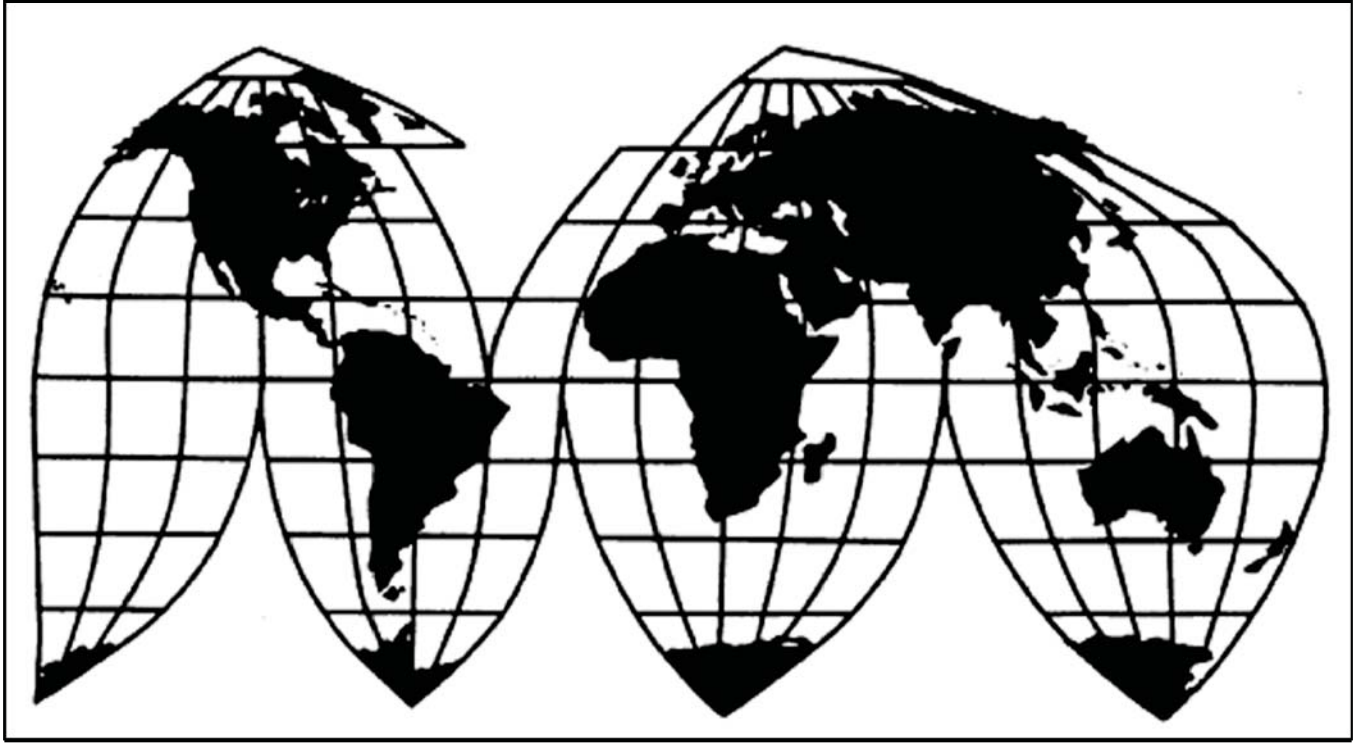
Emulsion Styrene-Butadiene Rubber from Brazil, Korea, Mexico, and Poland

Investigation Nos. 731-TA-1334-1337 (Preliminary)

Publication 4636 **September 2016**

U.S. International Trade Commission



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U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 731-TA-1334-1337 (Preliminary)
Emulsion styrene-butadiene rubber from Brazil, Korea, Mexico, and Poland

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of certain emulsion styrene-butadiene rubber from Brazil, Korea, Mexico, and Poland, provided for in subheading 4002.19.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV").

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under section 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

BACKGROUND

On July 21, 2016, Lion Elastomers LLC (Port Neches, Texas) and East West Copolymer, LLC (Baton Rouge, Louisiana) filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of certain emulsion styrene-butadiene rubber from Brazil, Korea, Mexico, and Poland. Accordingly, effective July 21, 2016, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty investigation Nos. 731-TA-1334-1137 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference

[1] The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 27, 2016 (81 FR 49262). The conference was held in Washington, DC, on August 11, 2016, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission made these determinations pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)). It completed and filed its determinations in these investigations on September 6, 2016.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Lion Elastomers, LLC ("Lion"), Port Neches, Texas, and East West Copolymer, LLC ("East West"), Baton Rouge, Louisiana on July 21, 2016, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of certain emulsion styrene-butadiene rubber ("ESBR") [1] from Brazil, Korea, Mexico, and Poland.[2] The following tabulation provides information relating to the background of these investigations.[3][4]

Effective date	Action
July 21, 2016	Petition filed with Commerce and the Commission; institution of Commission investigations (81 FR 49262, July 27, 2016)
August 10	Commerce's notice of initiation (81 FR 55438, August 19, 2016)
August 11	Commission's conference
September 2	Commission's vote
September 6	Commission's determinations
September 13, 2016	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to this/these investigation(s).

[2] The petition is also supported by the International Union of Operating Engineers, Locals 216 and 426, which represents, respectively the employees producing ESBR at the East West Copolymers plant in Baton Rouge, Louisiana, and the Goodyear Chemical plant in Houston, Texas. The petition is also supported by the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL-CIO, CLC, Local 13-228-03, which represents the employees producing ESBR at the Lion plant in Port Neches, Texas. Petition, p. 3 and conference transcript p. 9 (McGrath).

[3] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

[4] A list of witnesses appearing at the conference is presented in app. B of this report.

shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[5]

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[6]

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[6] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

Part I of this report presents information on the subject merchandise, alleged dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY

ESBR is generally used in the production of rubber tires. The U.S. producers of ESBR are Lion, East West, and The Goodyear Tire & Rubber Company ("Goodyear"), while leading producers of ESBR outside the United States include ARLANXEO Brasil S.A. ("Arlanxeo Brazil") (formerly LANXESS) of Brazil, Kumho Petrochemical Co., Ltd. ("Kumho") and LG Chem, Ltd. ("LG Chem") of Korea, Industrias Negromex, S.A. de C.V. ("Negromex") of Mexico, and SYNTHOS S.A. of Poland. The leading U.S. importers of ESBR from Brazil is ***, from Korea are *** and ***, from Mexico is INSA LLC, and from Poland is Harwick Standard Distribution Corp. ("Harwick"). Leading importers of ESBR from nonsubject countries (primarily Germany, Russia, and South Africa) include ***, ***, and ***. U.S. purchasers of ESBR are most commonly end users in the tire manufacturing market. Leading purchasers, in order of size, are ***, ***, and ***.

Apparent U.S. consumption of ESBR totaled approximately *** pounds ($***) in 2015. Currently, three firms are known to produce ESBR in the United States. U.S. producers' U.S. shipments of ESBR totaled *** pounds ($***) in 2015, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled *** pounds ($***) in 2015 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** ($***) in 2015 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, tables C-1 and C-2. Except as noted, U.S. industry data are based on questionnaire responses of three

firms that accounted for all known U.S. production of ESBR during 2015. Usable questionnaire importer responses were received from 14 companies.[7] Based on a comparison of these firms' reported U.S. imports and import statistics, the responding importers represent 100.0 percent of U.S. imports from Brazil in 2015, 99.1 percent from Korea, 99.9 percent U.S. imports from Mexico,[8] 100.0 percent U.S. imports from Poland,[9] and 75.0 percent from nonsubject countries.[10] Excepted as noted, U.S. imports in this report are based on data submitted in response to Commission questionnaires supplemented as appropriate with import statistics.[11]

Useable foreign producer/exporter questionnaire responses were received from one producer in Brazil, two in Korea, one in Mexico, and one in Poland. According to the responding producers and based on International Institute of Synthetic Rubber Producers ("IISRP") capacity data, these producers accounted for all of the production in their respective countries.

PREVIOUS AND RELATED INVESTIGATIONS

ESBR has been the subject of one prior antidumping duty proceeding in the United States. On April 1, 1998, Ameripol Synpol Corp., Akron, Ohio, and DSM Copolymer of Baton Rouge, Louisiana, filed petitions alleging that an industry in the United States was materially injured and threatened with material injury by reason of LTFV imports of ESBR from Brazil, Korea, and Mexico. The Commission determined that an industry in the United States was not materially injured or threatened with material injury by reason of imports of ESBR from Brazil, Korea, or Mexico.[12]

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[7] Eleven firms certified that they did not import ESBR from any source, at any time since January 1, 2013. One of these firms, ***.

In addition, *** did not provide a questionnaire response but reported that it imported ***. Email from ***, August 8, 2016.

[8] Negromex stated that it is Mexico's only producer of ESBR and INSA is its exclusive U.S. importer. Negromex's postconference brief, p. 1.

[9] Synthos stated that it is the sole Polish producer and exporter to the United States of ESBR. Synthos postconference brief, p.1.

[10] Estimates for U.S. imports of ESBR from Korea are based on imports entering under HTS numbers 4002.19.0015 and 4002.19.0019. Conference transcript, p. 32 (Warlick) and petition, p. 12. U.S. imports from every other source are based on HTS number 4002.19.0015. These calculations account for those firms who certified that they did not import ESBR at any time from any source since January 1, 2013.

[11] Questionnaire data are supplemented with nonresponding U.S. importers' U.S. imports under HTS number 4002.19.0015 and, for Korea only, also under HTS number 4002.19.0019. Nonsubject U.S. imports from China are based on official China exports to the United States under China's country-specific HTS number 4002.19.11 (Non-Solution-Polymerized Styrene Butadiene Rubber, Not Worked) as reported by China Customs in the GTIS/GTA database for U.S. imports from China.

[12] *Certain Emulsion Styrene-Butadiene Rubber from Brazil, Korea, and Mexico, Inv. Nos. 731-TA-794, 795 and 796 (Final)*, USITC Pub. 3190 (May 1999), p. 1.

ALLEGED SALES AT LTFV

On August 19, 2016, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on ESBR from Brazil, Korea, Mexico, and Poland.[13] Commerce has initiated antidumping duty investigations based on estimated dumping margins of 57.14 and 67.99 percent for ESBR from Brazil, 22.48 and 44.30 percent for ESBR from Korea, 22.39 percent for ESBR from Mexico, and 40.57 and 44.54 percent for ESBR from Poland.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:

> *For purposes of these investigations, the product covered is cold-polymerized emulsion styrene-butadiene rubber (ESB rubber). The scope of the investigations includes, but is not limited to, ESB rubber in primary forms, bales, granules, crumbs, pellets, powders, plates, sheets, strip, etc. ESB rubber consists of non-pigmented rubbers and oil-extended non-pigmented rubbers, both of which contain at least one percent of organic acids from the emulsion polymerization process. ESB rubber is produced and sold in accordance with a generally accepted set of product specifications issued by the International Institute of Synthetic Rubber Producers (IISRP). The scope of the investigations covers grades of ESB rubber included in the IISRP 1500 and 1700 series of synthetic rubbers. The 1500 grades are light in color and are often described as ''Clear'' or ''White Rubber.'' The 1700 grades are oil-extended and thus darker in color, and are often called ''Brown Rubber.'' Specifically excluded from the scope of these investigations are products which are manufactured by blending ESB rubber with other polymers, high styrene resin master batch, carbon black master batch (i.e., IISRP 1600 series and 1800 series) and latex (an intermediate product).*

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following provisions of the 2016 HTS: 4002.19.0015 and 4002.19.0019.[14]

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[13] *Emulsion Styrene-Butadiene Rubber From Brazil, the Republic of Korea, Mexico, and Poland: Initiation of Less-Than-Fair-Value Investigations*, 81 FR 55438, August 19, 2016.

[14] The general duty rate on the subject goods is free under subheading 4002.19.00.

THE PRODUCT

Description and applications

The subject products consist of the 1500 and 1700 series of ESBR elastomeric rubbers of styrene and butadiene copolymer as defined by IISRP, and generally recognized by the international industry.[15] [16] Subject ESBR elastomer is produced by a cold aqueous emulsion process at 41-55 degrees Fahrenheit, and finished as a dry, or oil modified crumb-like polymeric material typically containing about 23.5 percent styrene, which is most often sold pressed into bales of up to about 80 pounds;[17] however, the petition covers ESBR in all physical forms regardless of type of packaging. The 1500 series is considered a "neat" or pure form of emulsion styrene-butadiene rubber, while the 1700 series contains petroleum-based processing extender oil as a homogenized component of the rubber particle.[18] The oil component of the rubber particle aids in the eventual processing of ESBR compounds that are extruded, mixed, and rolled into rubber goods. The styrene content of ESBR can be modified to provide products with special advantages and properties. A “normal” level of styrene is 23.5 percent, but in selected cases a lower styrene content polymer may be obtained that has advantages in mixing, shaping, building, and curing.[19]

Over 70 percent of subject ESBR is used for rubber tires. It is also used in a variety of other products, including conveyor belts, shoe soles, some kinds of hoses, roller coverings, flooring and other uses.[20] End users of ESBR formulate compounds prior to the production of rubber goods. Processing begins by breaking down the bales through heating, mixing, and rolling in order to plasticize the rubber. The time required for breakdown is much less for ESBR than for natural rubber, which is compounded in a similar manner. Many ingredients such as carbon black, oils, antioxidants, processing aids, vulcanizing agents, silica, and zinc oxide are often added to make the various recipes. End users may also formulate compounds using subject ESBR with nonsubject sources of ESBR such as carbon black master batch (“CBMB”), and with solution styrene-butadiene rubber (“SSBR”)[21] made by the solution process.[22] SSBR is

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[15] The Synthetic Rubber Manual, 2012, IISRP, http://iisrp.com/WebPolymers/AboutRubber/09ESBR16Aug2012.pdf, retrieved August 1, 2016.

[16] The characteristics and uses of the subject ESBR have reportedly not changed materially since the original investigation in 1998-99. Petition, p. 8.

[17] Conference transcript, p. 119 (Isaacs).

[18] The Oil content of 1700 grades may vary typically from 23 percent into the 30 percent range, and consist of naphthenic, paraffinic, and aromatic types. East West and Lion material and safety data sheets, http://www.ewcopolymer.com; and www.lionelastomers.com , retieved August 4, 2016.

[19] Petition, pp. 6-7.

[20] Conference transcript, p. 26 (Isaacs).

[21] Nonsubject SSBR 1200 series is produced by a solution process as opposed to the emulsion process, and along with 1600 and 1800 series CBMB emulsion ESBRs, requires different production facilities. Conference transcript, pp. 26-27 (Isaacs).

[22] Petition, p. 7.

more expensive to produce, but is used in high performance tire production primarily because it imparts a lower rolling resistance and improves fuel consumption.[23]

Unlike natural rubber, peptides are not needed, and less zinc oxide and fatty acid are needed to accelerate the breakdown of ESBR. ESBR has better extrusion properties than natural rubber and has a lesser tendency to scorch, and also better tread wear properties than natural rubber, while natural rubber has better grip.[24] Thus, the two may be blended, and ESBR can be blended with all diene polymers in any proportion to adjust the final properties and economy of the finished product. Rubber tires, the largest end use for ESBR, may require a number of differently formulated compounds, depending upon the characteristics desired in each tire component. Tire components such as tire tread, sidewall, or core generally use specialized formulations.[25]

There are several IISRP SBR series of products that are not covered by the petition. They describe significantly different kinds of synthetic rubber materials or products. For example, the 1600 and 1800 series are grades of emulsion SBR carbon black masterbatch (CBMB) produced by a different process using separate production equipment, and shipped in solid slabs with a hard rubber consistency. Other categories of emulsion styrene-butadiene rubber not covered by the scope definition are the 1000 and 1900 series of synthetic rubbers, as specified under the IISRP numbering system. Unlike subject cold process ESBR, the 1000 series is a "hot" polymerized series of emulsion styrene-butadiene rubber used in a variety of end uses other than those to which subject ESBR is best suited. The 1900 series of emulsion styrene-butadiene rubber is a high-styrene synthetic rubber that is used in a variety of non-tire end uses. The SSBR solution rubber process 1200 series is also excluded as previously noted.

Manufacturing processes

Subject ESBR rubber is made by a continuous cold aqueous emulsion latex process at 41-55 degrees Fahrenheit, known technically as emulsion copolymerization, a free radical mechanism that joins individual styrene and butadiene molecules together in copolymer chains. The continuous manufacturing process is accomplished using five main ingredients which are added through a series of several reactors connected in series: (1) water, (2) the two monomers, styrene and butadiene, (3) soap emulsifier, (4) a polymer “modifier” used to control molecular structure, and (5) an “initiator” designed to drive the polymerization reaction. When about 60 percent of the monomers have been converted to polymer chains, the process is stopped by an “inhibitor” or “short-stop,” designed to prevent large increases in undesirable polymer chain branching and the commencing of polymer crosslinking beyond that point. [26] [27]

The resulting ESBR latex emulsion is next purified by removing unreacted butadiene and styrene for recycle via flash distillation and steam stripping, together with the addition of a

[23] Conference transcript, pp. 27-28 (Isaacs).
[24] Conference transcript, p. 27 (Isaacs).
[25] Petition, pp. 7-8, and exhibits I-8 and I-9.
[26] Conference transcript, pp. 25-26, (Isaacs).
[27] Petition, pp. 8-10.

stabilizing antioxidant. The 1500 series latex product at this point is ready for transfer to the finishing section, while in the case of the oil-extended 1700 series, the emulsified process oil must first be added to the purified rubber latex for intimate homogenization.[28]

The second phase of the continuous process, or finishing line process, is accomplished by first acidifying and coagulating the latex, thus separating the solid ESBR rubber particles from the water of the latex. The coagulated crumb is then washed, dewatered, dried, baled and packaged either as 1500 or 1700 series finished product.[29]

The emulsion polymerization process has several advantages. It is normally used under mild reaction conditions that are tolerant to water and requires only the absence of oxygen. The process is relatively robust to impurities and amenable to using a range of functionalized and non-functionalized monomers. Additional benefits include the fact that emulsion polymerization gives high solids contents with low reaction viscosity and is a cost-effective process. The physical state of the emulsion (colloidal) system makes it easy to control the process. Thermal and viscosity problems are much less significant than in bulk polymerization.[30]

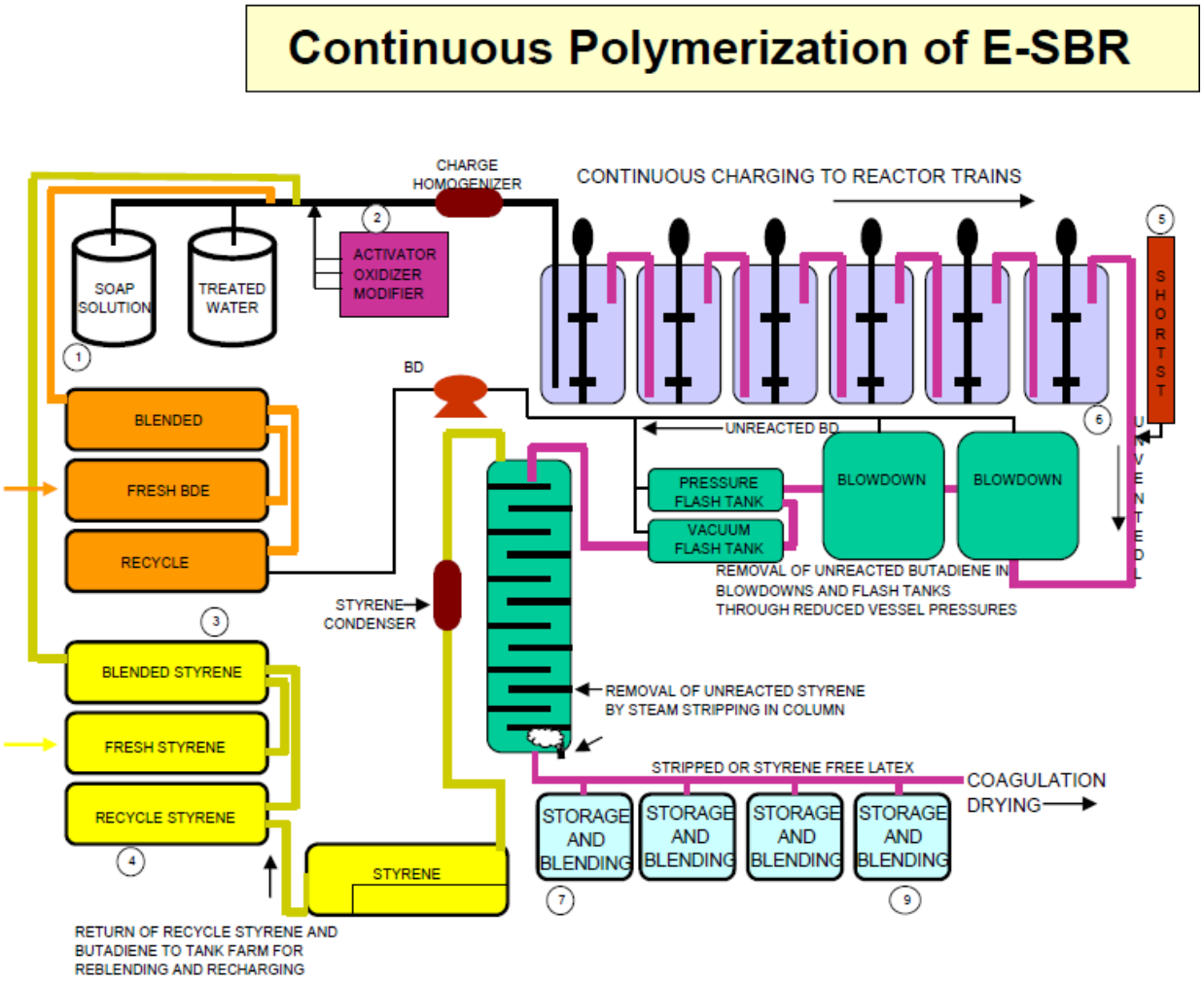
A detailed process flow diagram of the ESBR manufacturing process is presented in Figure I-1.

[28] The Synthetic Rubber Manual, 2012, IISRP, http://iisrp.com/WebPolymers/AboutRubber/09ESBR16Aug2012.pdf, retrieved August 1, 2016.

[29] Nitrile rubber (NBR) is sometimes produced on similar equipment in certain plants. Conference transcript, pp. 124-125 (Nelson).

[30] The Synthetic Rubber Manual, 2012, IISRP.

Figure I-1
ESBR: ESBR Process flow diagram



Source: The Synthetic Rubber Manual, IISRP, 2012.

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in these investigations. The petitioners propose that the Commission define one like product as defined in the Petitions. Respondents do not dispute the domestic-like product.[31]

[31] Conference transcript, p. 136 (Okun) and Negromex's postconference brief, p. 3. None of the other respondents addressed domestic-like product.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

The majority (approximately 70 percent) of ESBR is used by tire manufactures, primarily to manufacture tires for the replacement market and to a lesser degree to manufacture tires for original equipment manufacturers ("OEMs"). Other uses for ESBR include for the manufacture of conveyor belts, shoe soles, a variety of hoses, and flooring.[1] The 1500 and 1700 series of ESBR are the largest volume synthetic rubbers in use globally.[2] Demand for ESBR is generally driven by demand from the tire manufacturing industry for use in replacement tires. ESBR is produced as a dry, crumb-like material and is typically sold pressed into bales, with a "normal" level of styrene of 23.5 percent.[3]

Apparent U.S. consumption of ESBR decreased during 2013-2015 from *** pounds in 2013 to *** pounds in 2015. Overall, apparent U.S. consumption in 2015 was *** percent lower than in 2013.

CHANNELS OF DISTRIBUTION

U.S. producers and importers sold mainly to ***, as shown in table II-1.

Table II-1
ESBR: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling ESBR to *** regions in the contiguous United States (table II-2). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent between 101 and 1,000 miles and *** percent over 1,000 miles. *** sell ESBR within 100 miles of their U.S. point of shipment.

[1] Petition, Vol. I, pp. 7 and 18.
[2] Petition, Vol. I, p. 18.
[3] Petition, Vol. I, pp. 7 and 18.

Table II-2
ESBR: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject U.S. importers				
		Brazil	Korea	Mexico	Poland	Total Subject
Northeast	3	0	3	0	1	4
Midwest	3	2	4	1	1	8
Southeast	3	1	4	1	1	7
Central Southwest	3	1	2	1	1	5
Mountains	1	0	1	0	1	2
Pacific Coast	2	0	3	1	1	5
Other[1]	0	0	0	0	0	0
All regions (except Other)	1	0	1	0	1	2
Reporting firms	3	2	4	1	1	8

[1] All other U.S. markets, including AK, HI, PR, and VI.

Source: Compiled from data submitted in response to Commission questionnaires.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of ESBR have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced ESBR to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the limited availability of product sold in alternate markets, and small inventory level.

Industry capacity

Domestic capacity utilization decreased from *** percent in 2013 to *** percent in 2015, notwithstanding a *** percent reduction in capacity due to a *** percent drop in production during the same time period. Capacity, production, and capacity utilization were lower in January-June 2015 than in January-June 2016. This moderate level of capacity utilization suggests that U.S. producers may have the ability to increase production of ESBR in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, fluctuated between 2013 and 2015. U.S. producers' export shipments rose from *** percent in 2013 to *** in 2014, but fell to *** percent in 2015. Exports, as a percent of total shipments, are lower in interim 2015

than in interim 2016. U.S. producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

U.S. producers' inventories increased slightly, relative to U.S. shipments, from *** percent in 2013 to *** percent in 2015. Inventory levels were slightly lower in interim 2015 (*** percent) than in interim 2016 (*** percent). These inventory levels suggest that U.S. producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

*** responding U.S. producers stated that it could switch production from ESBR to other products. The other products that it can reportedly produce on the same equipment as ESBR are ***.

Supply constraints

*** U.S. producers reported supply constraints since January 2013. East West reported a temporary shutdown of its current *** facility during February and March 2014 while the facility ownership was being transferred from Lion to East West.[4] However, *** stated that it was able to deliver all agreed upon products and did not refuse customers at this time.

Subject imports from Brazil[5]

Based on available information, producers of ESBR from Brazil have the ability to respond to changes in demand with moderate changes in the quantity of shipments of ESBR to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and the ability to produce alternate products, tempered by low inventory levels and small-to-moderate export levels.

Industry capacity

The responding Brazilian producer, Arlanxeo Brazil, reported an increase in capacity utilization from *** percent in 2013 to *** percent in 2015, driven by an increase in production. Capacity utilization was lower in interim 2015 than in interim 2016, however, both capacity and production declined in interim 2016. This relatively moderate level of capacity

[4] Conference transcript, pg. 45-46 (Zeringue, Nelson), pg. 79-80 (Zeringue, Nelson).

[5] For data on the number of responding foreign firms and their share of U.S. imports from Brazil, please refer to Part I, "Summary Data and Data Sources."

utilization suggests that the Brazilian producers may have moderate ability to increase production of ESBR in response to an increase in prices.

Alternative markets

Arlanxeo Brazil's exports, as a percentage of total shipments, increased from *** percent in 2013 to *** percent in 2015. Exports, as a percent of total shipments, were higher in interim 2015 than in interim 2016. As a share of its total shipments, Arlanxeo Brazil's exports to markets outside of the United States decreased slightly from *** percent in 2013 to *** percent in 2015. This level of exports to third-country markets indicates that the Brazilian producer may have a moderate ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

The responding Brazilian producer reported a slight increase in inventories relative to total shipments from *** percent 2013 to *** percent 2015. Inventory levels were lower in interim 2015 (*** percent) than in interim 2016 (*** percent). These inventory levels suggest that the Brazilian producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Arlanxeo Brazil stated that it could ***.

Subject imports from Korea[6]

Based on available information, producers of ESBR from Korea have the ability to respond to changes in demand with moderate changes in the quantity of shipments of ESBR to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity and the availability of product sold in alternate markets.

Industry capacity

The responding Korean producers reported a decrease in capacity utilization from *** percent in 2013 to *** percent in 2015, despite a decrease in capacity due to a decrease in production. Capacity utilization was lower during interim 2015 than in interim 2016; however, both capacity and production are lower in interim 2016 than in interim 2015. This relatively

[6] For data on the number of responding foreign firms and their share of U.S. imports from Korea, please refer to Part I, "Summary Data and Data Sources."

high level of capacity utilization suggests that Korean producers may have a limited ability to increase production of ESBR in response to an increase in prices.

Alternative markets

Korean producers' exports, as a percentage of total shipments, fluctuated slightly between *** percent and *** percent during 2013-2015. Exports, as a percent of total shipments, were high in interim 2015 than in interim 2016. Korean producers' exports to markets outside of the United States decreased slightly from *** percent in 2013 to *** percent in 2015, indicating that Korean producers may have a considerable ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

The responding Korean producers reported a decrease in inventories, relative to total shipments, from *** percent in 2013 to *** percent in 2015. Inventory levels were higher in interim 2015 (*** percent) than in interim 2016 (*** percent). These inventory levels suggest that Korean producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Both Kumho and LG Chem stated that they ***.

Subject imports from Mexico[7]

Based on available information, the producer of ESBR in Mexico has the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of ESBR to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the moderate-to-large levels of unused capacity, the limited availability of product sold in alternate markets, and the ability to produce alternate products.

Industry capacity

The responding Mexican producer, Negromex, reported a decrease in capacity utilization from *** percent in 2013 to *** percent in 2015, driven by a decrease in production. Capacity utilization and production were higher in interim 2015 than in interim 2016. This level of capacity utilization suggests that the Mexican producer may have moderate-to-large ability to increase production of ESBR in response to an increase in prices.

[7] For data on the number of responding foreign firms and their share of U.S. imports from Mexico, please refer to Part I, "Summary Data and Data Sources."

Alternative markets

Negromex's exports, as a percentage of total shipments, increased from *** percent in 2013 to *** percent in 2015. Exports, as a percent of total shipments, were lower in interim 2015 than in interim 2016. Negromex's exports to markets outside of the United States decreased from *** percent in 2013 to *** percent in 2015, and were higher during interim 2015 than in interim 2016. This level of exports to third-country markets indicates that Mexican producers may have a moderate ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

Negromex's inventories, as a percentage of total shipments, increased from *** percent in 2013 to *** percent in 2015. Inventory levels were lower in interim 2015 (*** percent) than in interim 2016 (*** percent). These inventory levels suggest that the Mexican producer may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Negromex stated that it ***.

Subject imports from Poland[8]

Based on available information, the producer of ESBR in Poland has the ability to respond to changes in demand with moderate changes in the quantity of shipments of ESBR to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the large shipments to alternate markets and the ability to produce alternate products tempered by limited unused capacity and low inventory levels.

Industry capacity

The responding Polish producer, Synthos, reported a decrease in capacity utilization from *** percent in 2013 to *** percent in 2015, driven by a decrease in production. Capacity utilization and production were lower in interim 2015 than in interim 2016. This high level of capacity utilization suggests that the Polish producer may have limited ability to increase production of ESBR in response to an increase in prices.

[8] For data on the number of responding foreign firms and their share of U.S. imports from Poland, please refer to Part I, "Summary Data and Data Sources."

Alternative markets

Synthos's exports, as a percentage of total shipments, increased slightly from *** percent in 2013 to *** percent in 2015. Exports, as a percent of total shipments, were lower in interim 2015 than in interim 2016. Synthos's exports to markets outside of the United States decreased from *** percent in 2013 to *** percent in 2015, but were lower in interim 2015 than in interim 2015. These large shipments third-country markets indicate that the Polish producer may have a large ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

Synthos's inventories fluctuated, relative to total shipments, between 2013 and 2015. Inventories rose from *** percent in 2013 to *** percent in 2014, but fell to *** percent in 2015. Inventory levels were higher in interim 2015 (*** percent) than in interim 2016 (*** percent). These inventory levels suggest that the Polish producer may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Synthos stated that it ***.

Supply Constraints from Subject Countries

*** reported supply constraints for any of the subject countries between since January 2013.

Nonsubject imports

Based on public data, the largest sources of nonsubject imports during 2013-2015 were China, Germany, France, Taiwan, and Japan.[9] Based on questionnaire data, all nonsubject sources, including those listed, accounted for *** percent of all U.S. imports in 2015.[10]

[9] Official U.S. import statistics under statistical reporting number 4002.19.0015 and 4002.19.0019, accessed August 22, 2016.

[10] Compiled from data submitted in response to Commission questionnaires supplemented with data of nonresponding U.S. importers' U.S. imports under HTS 4002.19.0015 (plus, for Korea only, certain imports under 4002.19.0019) and GTA data for nonsubject U.S. imports from China, accessed August 18, 2016.

U.S. demand

Based on available information, the overall demand for ESBR is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the somewhat limited range of substitute products and the small-to-moderate cost share of ESBR in most of its end-use products.

End uses

U.S. demand for ESBR depends on the demand for production of replacement tires,[11] of which 80 percent involves replacement tires and 20 percent involves tires for original equipment manufacturers ("OEMs") to use on new vehicles.[12] The largest end-use market for ESBR is the tire manufacturing industry. According to U.S. producers, over 70 percent of ESBR sold on the market is used in the production of tires.[13] Other reported end uses include for conveyor belts, hosing, shoes, flooring, and mechanical goods.[14]

Cost share

ESBR accounts for a varying share of the cost of end-use products in which it is used. For ESBR used in tire manufacturing, most U.S. producers and importers reported cost shares ranging from *** percent to *** percent.[15] ESBR accounts for a *** cost share of mechanical rubber goods, a *** cost share in belting and hosing, and a *** cost share for compounders.[16]

Business cycles

*** U.S. producers and *** importers indicated that the market was subject to business cycles or conditions of competition. *** reported the ESBR market follows the seasonal fluctuations of the tire manufacturing industry, which generally slows down during major holiday periods, and the cyclical business conditions in the automobile industry.

Demand trends

Three U.S. producers and three of eleven importers reported a decrease in U.S. demand for ESBR since January 1, 2013 (table II-3). *** pointed towards the shift to high performance tires and use of SSBR as reasons for declines in demand, and *** stated that declines in "Off Road" tires and conveyor belting, both end uses of ESBR, affected the market. A plurality of

[11] Conference transcript, p. 12 (Okun).
[12] Conference transcript, p.98 (Warlick).
[13] Conference transcript, p. 26 (Isaacs).
[14] Petition, Vol. 1, p. 7.
[15] However, two firms reported cost shares as high as 90 percent.
[16] *** reported a cost share of *** for custom mix products.

importers reported that U.S. demand fluctuated during the period. All U.S. producers reported that demand decreased outside the United States, while a plurality of importers reported that demand fluctuated outside the United States. *** forecasts ESBR losing market share to SSBR until 2019 due to "the implementation of the tire labelling legislations in the EU, Japan, South Korea, and elsewhere," but acknowledges that complete substitution of ESBR to SSBR is unlikely.[17] Both U.S. producers and foreign producers agree that demand for ESBR follows the demand of tires.[18]

Table II-3
ESBR: Firms' responses regarding U.S. demand and demand outside the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	0	1	3	0
Importers	3	1	3	4
Demand outside the United States:				
U.S. producers	0	0	3	0
Importers	2	1	2	3

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

Responding firms identified limited substitutes for ESBR, including natural rubber and solution styrene butadiene rubber ("SSBR"). All U.S. producers reported natural rubber, a natural agricultural product,[19] as a substitute for ESBR. Many importers reported that natural rubber and SSBR can be used as substitutes for ESBR in tires. According to petitioners, ESBR is not fully substitutable for natural rubber or other synthetic rubbers, although manufacturers may be able to alter their production recipes somewhat to change the balance between ESBR and natural or synthetic rubbers, while still meeting their desired mechanical and surface properties and economy of the final product.[20]

Petitioners argued that using natural rubber as a substitute for ESBR would require significant formulation and operational changes for a manufacturer.[19] They reported that certain tire tread compounds that utilize 50 percent ESBR and 50 percent natural rubber might be adjusted to 60/40 parameters in either direction without changing the characteristics of the resulting product.[21] According to petitioners, ESBR has better extrusion properties for hoses and belts, good resistance to crack growth, a lower tendency to scorch, and superior tread wear characteristics and wet traction, whereas natural rubber provides grip characteristics,

[17] Petitioner's postconference brief, p. 104-105.
[18] Conference transcript, p. 12 (Okun), p. 40 (Warlick).
[19] Conference transcript, pp. 71-72 (Warlick).
[20] Petitions, Vol. I , pp. 7 and 20.
[21] Conference transcript, p. 20 (Nelson), 26-28 (Isaacs), 39 (Warlick), 92-93 (Zeringue).

heat resistance, superior building tack, and green strength that help hold the tire together during the production process.[22]

Petitioners argued that SSBR provides greater traction than ESBR and thus enhances a tire manufacturer's ability to achieve higher rates of gas mileage SSBR, used mainly for high performance ("green") tires,[23] is more expensive to produce and more difficult to process than ESBR and has a different chemical composition and molecular structure.[24] Production of SSBR requires different technology and equipment than ESBR.[25] SSBR could be substituted for non-tire end uses of ESBR, but at a price premium.[26]

*** U.S. producers and *** responding importers stated that natural rubber can affect the price of ESBR, while *** responding importers stated that SSBR can affect the price of ESBR.[27] According to petitioners, natural rubber and SSBR follow similar demand trends as ESBR, but prices of natural rubber, ESBR, and SSBR are not perfectly correlated due to limited substitutability, importance of regional growing conditions (natural rubber), differences in butadiene and styrene raw material content (ESBR and SSBR), and non-sectoral demand.[28] Figure II-1 shows how prices of natural and synthetic rubber have trended between January 2012 and March 2016.[29] Petitioners stated that most major tire producers are backward integrated into SSBR.[30] Thus, as *** stated in its questionnaire response, no U.S. producers are currently offering SSBR.

Figure II-1
Quarterly natural and synthetic rubber prices, January - March 2016

* * * * * * *

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported ESBR depends upon such factors as quality, availability of supply, and price, and conditions of sale (e.g., contract terms and lead times between order and delivery dates). Based on available data, staff believes that

[22] Conference transcript, pp. 93-95 (Zeringue, Isaacs); petition, Vol. I, pp. 7 and 20.
[23] Conference transcript, pg. 70 (Warlick).
[24] Conference transcript, pg. 26-27 (Isaacs).
[25] Conference transcript, pg. 26-27 (Isaacs).
[26] Conference transcript, p. 96 (Zeringue).
[27] Six importers did not report any substitutes for ESBR.
[28] Conference transcript, pp. 39-40 (Warlick).
[29] Figures for synthetic rubber ("USA SBR") include copolymers of styrene and butadiene (SBR) and styrene block-copolymers (SBR, SBS/SIS/SEBS); of acrylonitrile and butadiene (NBR); of ethylene and propylene (EPDM); of isobutylene and isoprene (butyl rubber IIR); and polymers of butadiene (BR), isoprene (IR) and chloroprene (CR).
[30] Conference transcript, p.180 (Zeringue).

there is a moderate-to-high degree of substitutability between domestically produced ESBR and ESBR imported from subject sources.

Lead times

ESBR is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were sold from inventory, with lead times averaging *** days. The remaining *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. Importers reported that *** percent of their commercial shipments were sold from inventory, with lead times averaging *** days.

Factors affecting purchasing decisions

Purchasers responding to lost sales and lost revenue allegations[31] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for ESBR. The major purchasing factors identified by firms include ***, with *** most frequently cited. Purchasers reported factors affecting quality to include ***, while *** affect availability and supply.

Comparison of U.S.-produced and imported ESBR

In order to determine whether U.S.-produced ESBR can generally be used in the same applications as imports from Brazil, Korea, Mexico, and Poland, U.S. producers and importers, were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-4, a *** of responding producers and responding importers reported that ESBR from the United States and subject countries are "always" or "frequently" interchangeable, and responding producers and responding importers also generally reported that subject imports are "always" or "frequently" interchangeable with one another. Although U.S. producers reported that subject and nonsubject country ESBR products also were "always" or "frequently" interchangeable, importer responses were more varied. *** stated that ESBR is highly commoditized, which makes it interchangeable with material produced by different suppliers around the world. *** stated that products are sometimes interchangeable depending on the oil extended grade and the types of oil and polymers used. *** pointed to difference manufacturing processes and techniques for interchangeability issues. *** stated that ESBR from one source is "never" interchangeable with ESBR from any other sources.

[31] This information is compiled from responses by purchasers identified by petitioners to the lost sales and lost revenue allegations that they submitted. See Part V for additional information.

Table II-4

ESBR: Interchangeability between ESBR produced in the United States and in other countries, by country pairs

Country pair	U.S. Producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Brazil	2	1	0	0	2	2	2	1
United States vs. Korea	2	1	0	0	2	3	2	1
United States vs. Mexico	2	1	0	0	3	1	1	1
United States vs. Poland	2	1	0	0	2	1	2	1
Brazil vs. Korea	2	1	0	0	3	1	2	1
Brazil vs. Mexico	2	1	0	0	3	1	1	1
Brazil vs. Poland	2	1	0	0	2	1	1	1
Korea vs. Mexico	2	1	0	0	3	1	1	1
Korea vs. Poland	2	1	0	0	2	1	1	1
Mexico vs. Poland	2	1	0	0	2	0	2	1
United States vs. China	2	1	0	0	1	0	2	1
United States vs. Germany	2	1	0	0	2	0	2	1
United States vs. Other	2	1	0	0	1	1	2	1
Brazil vs. China	2	1	0	0	1	0	2	1
Brazil vs. Germany	2	1	0	0	2	0	2	1
Brazil vs. Other	2	1	0	0	1	0	1	1
Korea vs. China	2	1	0	0	1	0	2	1
Korea vs. Germany	2	1	0	0	2	0	2	1
Korea vs. Other	2	1	0	0	1	0	1	1
Mexico vs. China	2	1	0	0	1	0	2	1
Mexico vs. Germany	2	1	0	0	2	0	2	1
Mexico vs. Other	2	1	0	0	1	0	1	1
Poland vs. China	2	1	0	0	1	0	2	1
Poland vs. Germany	2	1	0	0	2	0	2	1
Poland vs. Other	2	1	0	0	1	0	1	1
China vs. Germany	2	1	0	0	2	0	2	1
China vs. Other	2	1	0	0	1	0	1	1
Germany vs. Other	2	1	0	0	1	0	1	1

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of ESBR from the United States, subject, or nonsubject countries. As seen in table II-5, most U.S. producers indicated that factors other than price were "never" significant when comparing ESBR from various sources, whereas importers' responses were varied. A plurality of importers reported that factors other than prices were "frequently" significant for the United States compared to Brazil and the United States compared to Korea. Importers were split between factors other than price being "sometimes" and "never"

significant for the United States compared to Mexico, and a plurality of importers stated other factors were “sometimes” significant for the United States compared to Poland.

Table II-5

ESBR: Significance of differences other than price between ESBR produced in the United States and in other countries, by country pair

Country pair	U.S. Producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Brazil	1	0	0	2	0	3	2	1
United States vs. Korea	1	0	0	2	1	5	1	1
United States vs. Mexico	1	0	0	2	0	1	2	2
United States vs. Poland	1	0	0	2	1	1	2	1
Brazil vs. Korea	1	0	0	2	2	2	1	1
Brazil vs. Mexico	1	0	0	2	0	1	2	2
Brazil vs. Poland	1	0	0	2	0	1	2	1
Korea vs. Mexico	1	0	0	2	0	1	2	2
Korea vs. Poland	1	0	0	2	0	1	1	2
Mexico vs. Poland	1	0	0	2	0	1	2	1
United States vs. China	1	0	0	2	0	1	1	1
United States vs. Germany	1	0	0	2	0	1	1	1
United States vs. Other	1	0	0	2	0	2	1	1
Brazil vs. China	1	0	0	2	0	1	1	1
Brazil vs. Germany	1	0	0	2	0	1	1	1
Brazil vs. Other	1	0	0	2	0	1	1	1
Korea vs. China	1	0	0	2	0	1	1	1
Korea vs. Germany	1	0	0	2	0	1	1	1
Korea vs. Other	1	0	0	2	0	1	1	1
Mexico vs. China	1	0	0	2	0	1	1	1
Mexico vs. Germany	1	0	0	2	0	1	1	1
Mexico vs. Other	1	0	0	2	0	1	1	1
Poland vs. China	1	0	0	2	0	1	1	1
Poland vs. Germany	1	0	0	2	0	1	1	1
Poland vs. Other	1	0	0	2	0	1	1	1
China vs. Germany	1	0	0	2	0	1	1	1
China vs. Other	1	0	0	2	0	1	1	1
Germany vs. Other	1	0	0	2	0	1	1	1

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of three firms that accounted for all known U.S. production of ESBR during 2015.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to three firms based on information contained in the petitions and other available industry sources. All three firms provided useable data on their productive operations.

Table III-1 lists U.S. producers of ESBR, their production locations, positions on the petitions, and shares of total production.

Table III-1
ESBR: U.S. producers of ESBR, their positions on the petitions, production locations, and shares of reported production, 2015

Firm	Position on petitions	Production location(s)	Share of production (percent)
East West	Support	Baton Rouge, LA	***
Goodyear	***	Houston, TX	***
Lion	Support	Port Neches, TX	***
Total			***

Source: Compiled from data submitted in response to Commission questionnaires.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms.

Table III-2
ESBR: U.S. producers' ownership, related and/or affiliated firms, since January 2013

* * * * * * *

No U.S. producers are related to foreign producers of the subject merchandise or related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, one U.S. producer (***) directly imported the subject merchandise from *** and one U.S. producer (***) purchased the subject merchandise from U.S. importers.

Changes in operations

Since January 1, 2013, the U.S. industry has experienced several changes with the closure of a facility in Baton Rouge, Louisiana in December 2013 by Lion Copolymer Holdings and restarting of the facility in the first quarter of 2014 by East West.[1] [2] In December 2014, Lion completed its acquisition of a facility in Port Neches, Texas from Ashland Inc.[3] [4]

All three domestic producers reported changes in their operations related to the production of ESBR since January 1, 2013 (table III-3).

Table III-3
ESBR: U.S. producers' reported changes in operations, since January 1, 2013

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.[5] U.S. capacity declined *** percent between 2013 and 2014, during which facilities at two of the three U.S. producers had shutdowns, and increased *** percent in 2015, ending *** percent lower than in 2013. Production declined in each year, *** percent in 2014 and *** percent in 2015, ending *** percent lower than in 2013. *** lower production during 2013-15 was due to East West, whose facility in Baton Rouge, Louisiana ceased production during February and March 2014 and had increased production prior to that to cover key customers during the downtime.[6] Lion, which also had lower production (*** percent) in 2015 compared with 2013, stated that the facility, owned at the time by Ashland, increased production to supply some of the customers affected by the Baton Rouge, Louisiana facility shutdown in early 2014.[7]

---

[1] "SR plant thrives, two years after rebirth," Rubber News, March 1, 2016, found at http://www.rubbernews.com/article/20160301/NEWS/302229996?template=printart.

[2] In addition, after it acquired the Baton Rouge facility, East West negotiated with the union to reduce the cost structure by cutting the workforce in approximately half and changing the work rules. Conference transcript, p.44 (Isaacs).

[3] "Lion Copolymer acquires Ashland's elastomers unit in Texas, US," Chemicals Technology,

[4] Lion stated that it acquired this plant from Ashland to diversify its portfolio, to include hot polymerized ESBR, a specialized product unrelated to the tire market. In addition, the facility has raw material logistics advantages with its deep sea dock and substantial storage capacity for things such as butadiene. Conference transcript, pp. 50-51 (Zeringue).

[5] One firm, ***.

[6] Conference transcript, pp. 45-46 (Nelson).

[7] Conference transcript, pp. 45-46 (Nelson).

Table III-4
ESBR: U.S. producers' production, capacity, and capacity utilization, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Figure III-1
ESBR: U.S. producers' production, capacity, and capacity utilization, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Alternative products

As shown in table III-5, ESBR represents the majority of the product produced on the equipment used in the production of ESBR. Production of ESBR accounted for *** percent of total production in any period in 2015, while carbon black master batch accounted for *** percent and all other products accounted for *** percent. *** U.S. producers reported producing carbon black master batch and other products.[8] *** reported being able to switch production between ESBR and ***. *** stated that ***.

Table III-5
ESBR: U.S. producers' overall capacity and production on the same equipment as subject production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. Total shipments declined *** percent between 2013 and 2014 and *** percent in 2015, ending *** percent lower than in 2013. Commercial shipments, which accounted for the majority of total shipments during the period examined, followed a similar trend declining *** percent between 2013 and 2014 and *** percent in 2015, ending *** percent lower than in 2013. Total shipments were *** percent higher in interim 2016 than in interim 2015, while commercial U.S. shipments were *** percent higher. Commercial U.S. shipments were lower in 2015 compared with 2013 for each of the U.S. producers, although the majority of the decline was due to *** in 2014 when ***.[9] While commercial U.S. shipments for all firms declined between 2013 and 2014, they increased in 2015 at ***, and were higher in interim 2016 than in interim 2015 for ***.

*** had internal consumption and transfers to related firms during the period examined, accounting for approximately *** of its total shipments, by quantity. *** had

[8] These other products included ***.
[9] ***answers to Staff questions, August 17, 2016.

exports during the period examined, although the share of total shipments differed. Exports during the period examined accounted for between *** percent of total shipments for ***, *** percent for ***, and *** percent for ***. The share of total shipments accounted for by exports declined for *** between 2013 and 2015, but where higher for ***.

Table III-6
ESBR: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Figure III-2 present U.S. producers' U.S. shipments by grade and shipment type.[10] The largest share of *** ESBR. The largest share of *** internal consumption and transfers to related firms was *** ESBR.

Figure III-2
ESBR: U.S. producers' U.S. shipments by grade and shipment type, 2015

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' inventories increased *** percent between 2013 and 2014, then declined *** percent in 2015, ending *** percent lower than in 2013.[11] The majority of this change was accounted for by ***, which along with ***, followed this trend. *** followed an opposite trend, but was also lower (*** percent) in 2015 than in 2013.

The ratio of U.S. producers' inventories to U.S. production, to U.S. shipments, and to total shipments followed a similar trend as U.S. producers' inventories, increasing in 2014 and then declining in 2015.

Table III-7
ESBR: U.S. producers' inventories, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

[10] Data on U.S. producers' U.S. shipments by grade are presented in appendix D.
[11] U.S. producers' inventories were *** percent higher in interim 2016 than in interim 2015.

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' imports and purchases of ESBR are presented in table III-8. *** stated that it imported ***.

Table III-8
ESBR: U.S. producers' U.S. production, imports and purchases, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") declined by *** PRWs (*** percent) between 2013 and 2015, and were *** PRWs (*** percent) lower in interim 2016 than in interim 2015. *** of the decline was due to East West which cut its workforce by approximately half (*** PRWs) after it acquired the Baton Rouge facility and reorganized the facility to operate using fewer PRWs more efficiently.[12]

Table III-9
ESBR: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

CAPTIVE CONSUMPTION[13]

Section 771(7)(C)(iv) of the Act states that–[14]

> *If domestic producers internally transfer significant production of the domestic like product for the production of a downstream article and sell significant production of the domestic like product in the merchant market, and the Commission finds that–*
>
> *(I) the domestic like product produced that is internally transferred for processing into that downstream article does not enter the merchant market for the domestic like product,*

[12] Conference transcript, p. 44 and 68 (Nelson).
[13] Appendix C, table C-2 presents data on the merchant market for ESBR.
[14] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

(II) the domestic like product is the predominant material input in the production of that downstream article, and

then the Commission, in determining market share and the factors affecting financial performance . . ., shall focus primarily on the merchant market for the domestic like product.

Transfers and sales

As reported in table III-6, internal consumption accounted for *** percent U.S. producers' U.S. shipments of ESBR during January 2013-June 2016. Transfers to related firms accounted for an additional *** percent over the same period.

First statutory criterion in captive consumption

The first requirement for application of the captive consumption provision is that the domestic like product that is internally transferred for processing into that downstream article not enter the merchant market for the domestic like product. U.S. producers reported internal consumption of ESBR for the production of tires. However, no U.S. producer reported diverting ESBR intended for internal consumption to the merchant market.[15]

Second statutory criterion in captive consumption

The second criterion of the captive consumption provision concerns whether the domestic like product is the predominant material input in the production of the downstream article that is captivity produced. With respect to the downstream articles resulting from captive production, ESBR reportedly comprises *** percent of the finished cost of tires.[16]

[15] Email from ***, August 22, 2016.
[16] Email from ***, August 22, 2016.

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 52 firms believed to be importers of ESBR, as well as to all U.S. producers of ESBR.[1] Usable questionnaire responses were received from 14 companies.[2] Table IV-1 lists all responding U.S. importers of ESBR from Brazil, Korea, Mexico, Poland, and other sources, their locations, and their shares of U.S. imports, in 2015.

Table IV-1
ESBR: U.S. importers, their headquarters, and share of total imports by source, 2015

Firm	Headquarters	Share of imports by source (percent)				
		Brazil	Korea	Mexico	Poland	Subject sources
AirBoss	Newmarket, ON	***	***	***	***	***
Alternative Rubber	Amherst, NY	***	***	***	***	***
Americas International	Akron, OH	***	***	***	***	***
Arlanxeo USA	Pittsburgh, PA	***	***	***	***	***
Channel Prime	Des Moines, IA	***	***	***	***	***
Cooper	Findlay, OH	***	***	***	***	***
Goodyear	Akron, OH	***	***	***	***	***
Harwick	Akron, OH	***	***	***	***	***
INSA	Houston, TX	***	***	***	***	***
Intertex	Carrollton, GA	***	***	***	***	***
LG Chem America	Atlanta, GA	***	***	***	***	***
Michelin	Greenville, SC	***	***	***	***	***
POSCO Daewoo	Teaneck, NJ	***	***	***	***	***
All other firms	Various	***	***	***	***	***
Total		***	***	***	***	***

Table continued on next page.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by ***, may have accounted for more than three percent of total imports under HTS subheading 4002.19.0015 or 4002.19.0019 in any year during 2013-2015.

[2] For discussion of data coverage please refer to Part I, "Summary Data and Data Sources."

Table IV-1--Continued
ESBR: U.S. importers, their headquarters, and share of total imports by source, 2015

Firm	Headquarters	Share of imports by source (percent)				
		China	Germany	All other sources	Nonsubject sources	All import sources
AirBoss	Newmarket, ON	***	***	***	***	***
Alternative Rubber	Amherst, NY	***	***	***	***	***
Americas International	Akron, OH	***	***	***	***	***
Arlanxeo USA	Pittsburgh, PA	***	***	***	***	***
Channel Prime	Des Moines, IA	***	***	***	***	***
Cooper	Findlay, OH	***	***	***	***	***
Goodyear	Akron, OH	***	***	***	***	***
Harwick	Akron, OH	***	***	***	***	***
INSA	Houston, TX	***	***	***	***	***
Intertex	Carrollton, GA	***	***	***	***	***
LG Chem America	Atlanta, GA	***	***	***	***	***
Michelin	Greenville, SC	***	***	***	***	***
POSCO Daewoo	Teaneck, NJ	***	***	***	***	***
All other firms	Various	***	***	***	***	***
Total		***	***	***	***	***

Note.--Data for "All other firms" corresponds to imports identified in proprietary Customs records as imports of ESBR for those firms that did not submit a questionnaire response (in which they either provided data or certified they did not import ESBR at any time from any sources since January 1, 2013). These data include any such imports under HTS 4002.19.0015 from all countries, except for imports from Korea and China. For imports from Korea, data for "all other firms" include data for both HTS 4002.19.0015 and 4002.19.0019. Nonsubject U.S. imports from China are based on Global Trade Atlas exports to the United States reported by China under its ESBR specific HS number 4002.19.11.

Source: Compiled from data submitted in response to Commission questionnaires and proprietary Customs import data.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of ESBR from Brazil, Korea, Mexico, Poland, and all other sources.[3] Subject imports increased *** percent between 2013 and 2014 and then declined *** percent in 2015, ending *** percent higher than in 2013. Each subject country followed a similar trend. A majority of the increase was due to imports from Brazil which increased from *** pounds to *** million pounds. ***, stated that prior to 2014, ***.[4] U.S. imports from Korea increased *** percent between 2013 and 2014, and then declined *** percent, ending *** percent higher than in 2013.[5] U.S. imports from Mexico increased *** percent between 2013 and 2014, and then declined *** percent in 2015, ending

[3] ***.

[4] Arlanxeo's postconference brief, p. 3. Additional information regarding ***.

[5] *** U.S. importers of ESBR from Korea, stated that the firm's U.S. imports increased due to increased demand in 2014 after the closure of the Baton Rouge, Louisiana facility.

*** percent higher than in 2013. U.S. imports from Poland increased from *** pounds in 2013 to *** pounds in 2014, and then declined *** percent in 2015. ***.[6]

U.S. imports of ESBR from nonsubject sources increased *** percent between 2013 and 2014, and then decreased *** percent in 2015, ending *** percent higher than in 2013. Imports from subject and nonsubject sources were *** and *** percent lower, respectively, in interim 2016 than in interim 2015.

Table IV-2
ESBR: U.S. imports, by source, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Figure IV-1
ESBR: U.S. imports, by source, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[7] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[8] As shown in table IV-3, imports from all subject countries except Poland accounted for over 20 percent of total imports of ESBR by quantity, while imports from Poland accounted for *** percent and *** percent of total imports of ESBR by quantity during July 2015-June 2016, using adjusted official statistics and questionnaire data supplemented by CNIF data, respectively.

[6] Email from ***, August 10, 2016.

[7] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[8] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Table IV-3
ESBR: U.S. imports, by source, July 2015 through June 2016

* * * * * * *

Questionnaire data with CNIF supplement: Compiled from data submitted in response to Commission questionnaires, supplemented with data on all nonresponding U.S. importers' U.S. imports under HTS 4002.19.0015 (plus, for Korea only, certain imports under 4002.19.0019), accessed August 18, 2016.

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Figure IV-2 presents data on U.S. importers' U.S. shipments by grade in 2015. For all but Mexico and Germany, the majority of U.S. importer's U.S. shipments consisted of 1500 grade ESBR, with 1700 grade ESBR accounting for the remainder. No importers had shipments of subject ESBR other than 1500 and 1700 grade.[9]

Figure IV-2
ESBR: U.S. importers' U.S. shipments by grade, 2015.

* * * * * * *

Presence in the market

Table IV-4 and figure IV-3 present information on the monthly presence of U.S. imports in the United States during January 2013 through June 2016. U.S. imports from Korea and Mexico were present in the U.S. market in every month during this period. There were no U.S. imports from Brazil prior to December 2013, but they were present in each month afterwards, except in April 2016. Similarly, there were no U.S. imports from Poland prior to February 2014, but they were present in each month afterwards, except in July 2014.

[9] Data on U.S. importers' U.S. shipments by grade are presented in appendix D.

Table IV-4
ESBR: U.S. imports, by source and month of entry, January 2013 through June 2016

* * * * * * *

Figure IV-3
ESBR: Monthly U.S. imports, January 2015-June 2016

* * * * * * *

Geographical markets

Table IV-5 presents U.S. imports and border of entry during 2015. All, or virtually all, U.S. imports of ESBR from Brazil and Mexico entered through customs districts in the South, while U.S. imports from Korea entered in all regions (although only a small portion entered through customs districts in the South), as did U.S. imports from Poland (although the majority was through customs districts in the North). U.S. imports from nonsubject sources (primarily Germany) entered in all of the regions, with the majority entering through customs districts in the East.

Table IV-5
ESBR: U.S. imports, by source and border of entry, 2015

* * * * * * *

APPARENT U.S. CONSUMPTION

Table IV-6 and figure IV-4 present data on apparent U.S. consumption and U.S. market shares for ESBR. These data show that apparent U.S. consumption, by quantity declined *** percent from 2013 to 2015, while the value of apparent U.S. consumption declined by *** percent.

Table IV-6
ESBR: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Figure IV-4
ESBR: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. MARKET SHARES

U.S. market share data are presented in table IV-7. These data show that U.S. producers' market share, by quantity, declined *** percentage points between 2013 and 2015, while U.S. imports from subject sources increased *** percentage points and U.S. imports from nonsubject sources increased *** percentage points during the same period. Measured by value, U.S. producers' market share, by quantity, declined *** percentage points between 2013 and 2015, while U.S. imports from subject sources increased *** percentage points and U.S. imports from nonsubject sources increased *** percentage points during the same period.

Table IV-7
ESBR: U.S. consumption and market shares, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary raw material inputs to ESBR are styrene and butadiene. Raw material costs represented *** percent and *** percent of the costs of goods sold for ESBR in 2013 and 2015 respectively and declined to *** percent in interim 2016. As seen in figure V-1, the cost of styrene declined *** percent and the cost of butadiene decline *** percent between January 2013 and April 2016.[1]

Figure V-1

Material costs: U.S. contract prices of butadiene and styrene by month, January 2013-April 2016

* * * * * * *

U.S. inland transportation costs

*** U.S. producers and *** responding importers stated that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from *** to *** percent while importers reported costs of *** to *** percent[2].

PRICING PRACTICES

Pricing methods

U.S. producers and importers reported using primarily transaction-by-transaction negotiations and contracts (table V-1).

[1] *** reported the cost of styrene declining *** percent and the cost of butadiene declining *** percent between 2013 and June 2016. Prices based on ***.
Negromex's postconference brief, p. 17.

[2] Some producers and importers reported *** inland transportation costs.

Table V-1

ESBR: U.S. producers and importers reported price setting methods, by number of responding firms[1]

Method	U.S. producers	U.S. importers
Transaction-by-transaction	2	8
Contract	3	5
Set price list	1	0
Other	2	3

[1]The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. producers and importers reported selling the *** ESBR under annual contracts, while selling *** ESBR via spot sales (table V-2).

Table V-2

ESBR: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2015

* * * * * * *

A producer, ***, reported that certain contracts are priced on a monthly basis using adjusted raw material costs. *** reported that both contract and spot sales prices are adjusted based on a processing fee (e.g., conversion costs and contribution margin) and raw materials. *** stated that the processing fee in annual contracts has been driven down by cheap imports. *** stated that contract pricing is based on a specific formula on an annual timeframe, while spot sales are priced on a transaction-by-transaction basis determined by other suppliers' prices.

Sales terms and discounts

U.S. producers typically quote prices on an f.o.b. basis, while importers quote prices on both an f.o.b. and delivered basis. U.S. producers and importers did not offer discounts. *** producers reported sales terms of net 30 days, while *** producers reported net 60 days. Five of ten importers reported sales terms of net 30 days, while the remaining four reported sales terms of net 60 days. *** also reported sales terms of net 90 days.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following ESBR products shipped to unrelated U.S. customers during January 2013 – June 2016.

Product 1.-- IISRP 1502 grade of ESBR in all forms

Product 2.-- IISRP 1507 grade of ESBR in all forms

Product 3.-- IISRP 1712 grade of ESBR in all forms

Product 4.-- IISRP 1783 grade of ESBR in all forms

Two U.S. producers and eight importers provided usable pricing data for sales of the requested ESBRs products, although not all firms reported pricing for all ESBR products for all quarters.[3] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of ESBR and *** percent of U.S. shipments of subject imports from Brazil, Korea *** percent coverage, Mexico *** percent coverage, and Poland *** percent coverage in 2015.

Pricing data for products 1-4 are presented in tables V-3 to V-6 and figure V-2 to V-5.

Table V-3

ESBR: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-4

ESBR: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-5

ESBR: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-6

ESBR: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

[3] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

Figure V-2

ESBR: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2013-June 2016

* * * * * * *

Figure V-3

ESBR: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2013-June 2016

* * * * * * *

Figure V-4

ESBR: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2013-June 2016

* * * * * * *

Figure V-5

ESBR: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2013-June 2016

* * * * * * *

Price trends

Prices for ESBR decreased during January 2013 – June 2016. Table V-7 summarizes the price trends, by country and by pricing product. As shown in the table, domestic price decreases ranged from *** percent to *** percent during January 2013 – June 2016, and import price decreases ranged from *** percent to *** during January 2013 – June 2016.

Table V-7

ESBR: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and Brazil, Korea, Mexico, and Poland

* * * * * * *

Price comparisons

As shown in table V-8, prices for ESBR imported from Brazil, Korea, Mexico, and Poland were below those for U.S.-produced ESBR in 70 of 127 instances (***); margins of underselling ranged from ***. In the remaining 57 instances, prices for ESBR from subject countries were between *** above prices for the domestic ESBR.

Table V-8

ESBR: Instances of underselling/overselling and the range and average of margins, by country, January 2013 – June 2016

Source	Underselling				
	Number of quarters	Quantity (pounds)	Average margin (percent)	Margin Range (percent)	
				Min	Max
Brazil	9	***	***	***	***
Korea	19	***	***	***	***
Mexico	20	***	***	***	***
Poland	22	***	***	***	***
Total underselling	70	***	***	***	***
Source	**(Overselling)**				
	Number of quarters	**Quantity (pounds)**	**Average margin (percent)**	**Margin Range (percent)**	
				Min	**Max**
Brazil	1	***	***	***	***
Korea	26	***	***	***	***
Mexico	24	***	***	***	***
Poland	6	***	***	***	***
Total overselling	57	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of ESBR to report the names of purchasers for which U.S. producers experienced instances of lost sales or revenue due to competition from imports of ESBR from Brazil, Korea, Mexico, and Poland during January 2013 to June 2016. Of the three U.S. producers, *** reported that they had to reduce prices, and *** firms reported that they had lost sales. *** U.S. producers submitted the lost sale and lost revenue allegations that identified 12 firms from which they lost sales or revenue (five consisting of lost revenue allegations and 15 consisting of both lost sales and lost revenue).[4] Both producers identified Brazil, Korea, Mexico, and Poland as the country of origin for their lost sales and lost revenue allegations. U.S. producers were also asked to provide information regarding the timing, method of sale, and product type related to the lost sales and lost revenue allegations. *** producers stated that sales were lost and/or prices reduced between January 2015 to June 2016, on annual contracts, RFQ bids, and contract negotiations for both 1500 series and 1700 series ESBR.

[4] The 12 firms represented 20 separate allegations. One of the purchasers *** is a distributor of ESBR to non-tire industries for ***.

Staff contacted 12 purchasers and received responses from 11 purchasers. Responding purchasers reported purchasing *** pounds of ESBR during 2015 (table V-9). During 2015, purchasers purchased 68.6 percent from U.S. producers, 27.1 percent from subject countries, and 4.3 percent from nonsubject countries. Of the responding purchasers, four reported decreasing purchases from domestic producers, two reported increasing purchases, three reported no change, and three reported fluctuating purchases. Explanations for increasing purchases of domestic ESBR included increasing demand due to new production facilities, new business opportunities, and began distributing for a manufacturer. Explanations for decreasing purchases of domestic ESBR included supply concerns, U.S. producers shutting down plants, increased demand for SSBR to meet new tire requirements, loss in business, financial viability of East West, and business relationships.

Of the 11 responding purchasers, eight reported that they had shifted purchases of ESBR from U.S. producers to subject imports since 2013. Two of these purchasers reported that price was the reason for the shift, and the estimated purchases that they reported shifting ranged from *** to *** (table V-10). Other identified reasons for shifting from U.S. producers were the availability of specific grades, the closure of U.S. plants, risk mitigation, diversifying supply, and quality.

Of the 11 responding purchasers, two reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (table V-11; seven reported that they did not know). The reported estimated price reduction was *** percent.[5]

Table V-9
ESBR: Purchasers' responses to purchasing patterns

* * * * * * *

Table V-10
ESBR: Purchasers' responses to shifting supply sources

* * * * * * *

Table V-11
ESBR: Purchasers' responses to U.S. producer price reductions

* * * * * * *

[5] ***, a distributor for ***, was the only purchaser who reported an estimated U.S. price reduction.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Three U.S. producers, accounting for all U.S. production of ESBR, provided financial data on their ESBR operations. All U.S. producers reported their financial results on the basis of generally accepted accounting principles ("GAAP") and on a calendar year basis.

Since January 1, 2013, the plants producing ESBR in the United States have remained the same, however changes in ownership have occurred. The ESBR plant in Baton Rouge, Louisiana was owned by Lion[1] *** at the beginning of the period of investigation, but announced it was closing in December 2013.[2] The plant was idled in February and March 2014 until a purchase was completed by the other petitioning firm, East West, on April 16, 2014.[3] The plant in Port Neches, Texas, was then purchased by Lion from Ashland Chemical in December 2014.[4]

Goodyear, the only other producer of ESBR in the United States, ***. This section of the report presents data for the entire ESBR industry including ***. Information on the merchant market is available in appendix C at table C-2.

OPERATIONS ON ESBR

Table VI-1 presents aggregated data on U.S. producers' operations in relation to ESBR over the period examined, while table VI-2 shows the change in average unit values for the data presented in table VI-1 between yearly periods. Table VI-3 presents selected company-specific financial data.[5]

Table VI-1
ESBR: Results of operations of U.S. producers, 2013-15, January-June 2015, and January-June 2016

* * * * * *

[1] Lion Elastomers, LLC is wholly owned by Lion Copolymer Holdings, LLC.

[2] Conference transcript, p. 64 (Zeringue).

[3] "SR plant thrives, two years after rebirth," Rubber News, March 1, 2016, found at http://www.rubbernews.com/article/20160301/NEWS/302229996?template=printart.

[4] "Lion Copolymer acquires Ashland's elastomers unit in Texas, US," Chemicals Technology, December 3, 2014, found at http://www.chemicals-technology.com/news/newslion-copolymer-acquires-ashlands-elastomers-unit-in-texas-us-4458583.

[5] ***.

Table VI-2
ESBR: Changes in average unit values, 2013-15, January to June 2015, and January to June 2016

* * * * * *

Table VI-3
ESBR: Results of operations of U.S. producers, by firm, 2013-15, January-June 2015, and January-June 2016

* * * * * *

Net sales quantity and value

Net sales of ESBR consisted of commercial sales (*** percent), internal consumption (***percent), and transfers to related firms (*** percent) from January 2013 to June 2016. As mentioned earlier in this section, Goodyear ***.[6]

As shown in table VI-1, aggregate ESBR sales quantity and value decreased from 2013 to 2015. In January-June 2016 net sales quantity was higher, while net sales value was lower than in the comparable period in 2015. East West accounted for the ***, and Lion accounted for ***.[7] [8] [9]

The aggregate net sales unit value (per 1,000 pounds) for ESBR decreased from $*** in 2013 to $*** in 2015, and was lower in January-June 2016 ($***) than in January-June 2015 ($***).

Cost of goods sold and gross profit or (loss)

Raw materials account for the single largest component of overall COGS, accounting for between *** percent (in interim 2016) and *** percent (in 2013) of total COGS. Raw material costs, which represented *** percent of net sales value in 2013, declined to *** percent of net sales value in interim 2016.

Other factory costs, which are composed of both variable and fixed facility overhead costs, are the second largest component of total COGS. These costs decreased from 2013 to 2014 on a dollar basis, but increased on a per-unit basis, as a share of sales, and as a share of total COGS. From 2014 to 2015, other factory costs decreased on a dollar basis and on a per-

---

[6] ***.

[7] East West's sales volume *** in 2015 than in 2013.

[8] As mentioned previously in this section, East West's ESBR plant in Baton Rouge, LA was owned by Lion Copolymer, which announced in December 2013 that it would be indefinitely idling the plant on February 3, 2014. The plant reopened as East West after it was purchased by Greg Nelson (former CEO of Lion Copolymer from 2008-2013) and other investors, including seven former managers at the Baton Rouge plant. "It's back: SBR plant in La. to reopen as EW Copolymer," Rubber & Plastics News, March 3, 2014, found at www.rubbernews.com/article/20140303/NEWS/140309995. In response to questions by staff, East West attributed the ***. ***. Conference transcript, p. 43 (Isaacs).

[9] The composition of Goodyear's sales ***.

unit basis, but increased as a share of sales and COGS.[10] [11] The last component of COGS, direct labor, decreased from 2013 to 2015, but was higher in January-June 2016 compared to January-June 2015. As a share of COGS, direct labor was between *** percent (in 2014) and *** percent (January-June 2016).

The COGS to sales ratio decreased by *** percentage points from 2013 (*** percent) to 2015 (*** percent), and was *** percentage points lower in January-June 2016 (*** percent) than in January-June 2015 (*** percent).

Gross profit increased from $*** million in 2013 to $*** million in 2015. *** of the increase is attributable to ***, and the majority of ***.[12] [13] Gross profit was *** percent higher in January-June 2016 compared to January-June 2015.

SG&A expenses and operating income or (loss)

As shown in table VI-1, the industry's SG&A expense ratios (i.e., total SG&A expenses divided by total revenue) were between *** percent (2013) and *** percent (2015). Goodyear ***.[14]

Operating losses decreased from a *** in 2013 to a *** in 2015. The only ***.

Other expenses and net income or (loss)

Other expenses (net of other income), decreased from $*** in 2013 to $*** in 2014, before increasing to $*** in 2015 and were higher in January-June 2016 ($***) than in January-June 2015 ($***). Interest expense accounted for the majority of other expenses reported.[15]

The industry's net losses decreased from a *** in 2013 to a *** in 2015, and were lower in January-June 2016 than in January-June 2015.

[10] This divergence between decreasing costs on a per-unit basis, but increasing costs as a share of sales and as a share of COGS is due to the unit values of sales and COGS decreasing at a faster rate than the unit value of other factory costs (as seen in table VI-2).

[11] ***. ***.

[12] ***.

[13] ***. In response to questions by staff, ***.

[14] Goodyear's ***.

[15] In petitioners' postconference brief, it states that Lion and East West ***. Petitioners' postconference brief, p. 17. In the petition, it is explained that ***. Petitions Vol. I, p. 42.

Variance analysis

A variance analysis for the operations of U.S. producers of ESBR is presented in table VI-4.[16] The information for this variance analysis is derived from table VI-1. The analysis illustrates that from 2013 to 2015, the increase in operating income (or the decrease in the operating loss) is primarily attributable to a higher favorable net/cost variance despite an unfavorable price variance (i.e., costs and expenses decreased more than prices).

Table VI-4
ESBR: Variance analysis on the operations of U.S. producers, 2013-15, January-June 2015, and January-June 2016

* * * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm. As shown in table VI-5, ***.[17]

Table VI-5
ESBR: Capital expenditures and research and development expenses of U.S. producers, 2013-15, January-June 2015, and January-June 2016

* * * * * *

[16] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

[17] According to ***."

ASSETS, INVESTMENT, AND CAPITAL

Table VI-6 presents data on the U.S. producers' total assets, the ratio of operating income or (loss) to net assets, and the asset turnover ratio.

Table VI-6
ESBR: U.S. producers' total assets and return on investment, 2013-15

* * * * * *

The Commission requested U.S. producers of ESBR to describe any actual or potential negative effects of imports of ESBR from Brazil, Korea, Mexico, or Poland on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 presents a tally of U.S. producers' responses and table VI-8 provides the narrative responses.

Table VI-7
ESBR: Actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2013

* * * * * *

Table VI-8
ESBR: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2013

* * * * * *

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

THE INDUSTRY IN BRAZIL

Overview

The Commission issued foreign producers' or exporters' questionnaires to one firm believed to produce and/or export ESBR from Brazil.[3] Useable responses to the Commission's questionnaire were received from one firm: Arlanxeo Brasil S.A. ("Arlanxeo Brazil"). This firm's exports to the United States accounted for all U.S. imports of ESBR from Brazil over the period being examined. According to estimates requested of the responding Brazilian producer, the production of ESBR in Brazil reported in this Part of the report accounts for *** production of ESBR in Brazil. Arlanxeo, Arlanxeo Brazil's parent company, was established in April 2016 as a joint venture of LANXESS, headquartered in Cologne, Germany and Saudi Aramco, headquartered in Dhahran, Saudi Arabia.[4]

Table VII-1 lists the Brazilian producer of ESBR that responded to the Commission's questionnaire and certain 2015 summary data reported in response to Commission questionnaires.

Table VII-1
ESBR: Summary data on the firm in Brazil, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Arlanxeo Brazil	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-2, Arlanxeo Brazil reported in its questionnaire response operational or organizational changes since January 1, 2013.

Table VII-2
ESBR: Reported changes in operations by firms in Brazil

* * * * * * *

[3] These firms were identified through a review of information submitted in the petition and contained in *** records.

[4] "About ARLANXEO", Arlaxeo website, http://arlanxeo.com/en/about-arlanxeo/?type=98.

Operations on ESBR

Table VII-3 presents information on the ESBR operations of Arlanxeo Brazil. Capacity declined *** percent in 2014 and then increased *** percent in 2015, ending *** percent lower than in 2013. Capacity is projected to decline *** percent in 2016. The change in production capacity was due to ***. Production followed a similar trend, declining *** percent in 2014, increasing *** percent in 2015 (*** percent higher than in 2013), and is projected to decline *** percent in 2016. Arlanxeo Brazil associated the decline in production in 2013 and 2014 to ***. Exports to the United States increased *** percent between 2013 and 2014, as the firm ***.[5] Between 2014 and 2015, exports to the United States increased *** percent, but were projected to decline *** percent in 2016 and then increase *** percent in 2017. Exports to markets other than the United States (principally ***) increased *** percent between 2013 and 2015, and were projected to decline *** and *** percent in 2016 and 2017, respectively. Exports to all markets accounted for an increasing portion of the firm's shipments, from *** percent in 2013 to *** percent in 2015, but their share was projected to decline in 2016 and 2017.

Table VII-3
ESBR: Data for the producer in Brazil, 2013-15, January to June 2015, and January to June 2016 and projections for calendar years 2016 and 2017

* * * * * * *

Alternative products

As shown in table VII-4, Arlanxeo Brazil produced other products on the same equipment as ESBR, namely ***. These other products accounted for less than *** percent to total production.

Table VII-4
ESBR: Brazilian producers' overall capacity and production on the same equipment as subject production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Exports

According to *Global Trade Atlas* ("GTA"), the top export markets for ESBR from Brazil during 2013-15 included Argentina and China and countries in Europe such as Turkey, Spain, and Italy (table VII-5). In 2015, the United States was by far the largest export destination for the Brazilian product (38.9 percent), followed by Argentina (6.1 percent) and Turkey (6.0 percent).

[5] Arlanxeo postconference brief, p. 3. Additional information regarding ***.

Table VII-5
ESBR: Brazil's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Brazil's exports to the United States	16,712	61,070	67,280
Brazil's exports to other major destination markets.--			
Argentina	14,557	7,554	10,577
Turkey	14,514	7,191	10,399
China	1,659	401	8,407
Spain	1,234	1,204	7,648
Italy	3,752	6,762	7,597
Costa Rica	5,920	5,912	6,628
Belgium	2,980	3,060	6,302
Korea	500	208	6,167
All other destination markets	50,278	29,814	42,136
Total Brazil exports	112,107	123,177	173,142
	Value (1,000 dollars)		
Brazil's exports to the United States	19,784	59,570	47,883
Brazil's exports to other major destination markets.--			
Argentina	19,733	10,415	10,773
Turkey	12,348	5,927	5,473
China	1,796	465	3,917
Spain	1,045	904	4,096
Italy	3,028	5,305	3,821
Costa Rica	7,062	6,215	5,408
Belgium	2,560	2,204	2,772
Korea	463	181	2,598
All other destination markets	50,592	29,048	28,160
Total Brazil exports	118,409	120,232	114,900

Table continued on next page.

Table VII-5--Continued
ESBR: Brazil's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
Brazil's exports to the United States	1,184	975	712
Brazil's exports to other major destination markets.--			
Argentina	1,356	1,379	1,019
Turkey	851	824	526
China	1,083	1,160	466
Spain	846	750	536
Italy	807	784	503
Costa Rica	1,193	1,051	816
Belgium	859	720	440
Korea	926	868	421
All other destination markets	1,006	974	668
Total Brazil exports	1,056	976	664
	Share of quantity (percent)		
Brazil's exports to the United States	14.9	49.6	38.9
Brazil's exports to other major destination markets.--			
Argentina	13.0	6.1	6.1
Turkey	12.9	5.8	6.0
China	1.5	0.3	4.9
Spain	1.1	1.0	4.4
Italy	3.3	5.5	4.4
Costa Rica	5.3	4.8	3.8
Belgium	2.7	2.5	3.6
Korea	0.4	0.2	3.6
All other destination markets	44.8	24.2	24.3
Total Brazil exports	100.0	100.0	100.0

Source: Official exports statistics under HTS subheading 4002.19 (include out-of-scope merchandise) as reported by Brazil's Foreign Trade Secretariat (SECEX) in the GTIS/GTA database, accessed August 3, 2016.

THE INDUSTRY IN KOREA

Overview

The Commission issued foreign producers' or exporters' questionnaires to nine firms believed to produce and/or export ESBR from Korea.[6] Useable responses to the Commission's questionnaire were received from two firms: Kumho and LG Chem. These firms' exports to the United States accounted for virtually all U.S. imports of ESBR from Korea over the period being examined. According to estimates requested of the responding Korean producers, the production of ESBR in Korea reported in this Part of the report accounts for *** of the overall production of ESBR in Korea. Table VII-6 lists the Korean producers of ESBR that responded to the Commission's questionnaire and certain 2015 summary data reported in response to Commission questionnaires.

Table VII-6
ESBR: Summary data on firms in Korea, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Kumho	***	***	***	***	***	***
LG Chem	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

Neither producer in Korea reported in its questionnaire response any operational or organizational changes since January 1, 2013.

Operations on ESBR

Table VII-7 presents information on the ESBR operations of the responding producers and exporters in Korea. Capacity declined *** percent between 2013 and 2015, due to ***. Production declined *** percent between 2013 and 2015, ***. Exports, which accounted for over *** percent of total shipments in any period, declined *** percent during 2013-15. Exports to the United States, which accounted for less than *** percent of total shipments, increased *** percent during 2013-15 and are projected to decline *** percent in 2016.[7] [8]

[6] These firms were identified through a review of information submitted in the petitions and contained in *** records.

[7] Other export markets included other Asian markets including ***.

[8] *** reported maintaining inventories in the United States, equivalent to *** percent of the firm's exports to the United States in 2013, *** percent in 2014, and *** percent in 2015.

Table VII-7
ESBR: Data for producers in Korea, 2013-15, January to June 2015, and January to June 2016 and projections for calendar years 2016 and 2017

* * * * * * *

Alternative products

Neither producer in Korea reported producing other products on the same equipment as ESBR since January 1, 2013.

Exports

According to GTA, the top export markets for ESBR from Korea during 2013-15 included countries in Asia such as China and India (table VII-8). In 2015, the United States was the fifth largest export destination for the Korean product (7.9 percent), after China (20.3 percent), India (17.4 percent), Indonesia (10.6 percent), and Thailand (8.0 percent).

Table VII-8
ESBR: Korea's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Korea's exports to the United States	83,459	99,706	100,815
Korea's exports to other major destination markets.--			
China	286,647	250,990	259,304
India	264,641	295,083	222,858
Indonesia	145,390	115,536	136,261
Thailand	94,042	76,755	102,017
Vietnam	50,897	49,002	62,648
Japan	63,271	64,969	50,451
Taiwan	31,546	37,250	43,601
Turkey	52,091	53,785	42,650
All other destination markets	297,658	270,548	259,459
Total Korea exports	1,369,643	1,313,625	1,280,064
	Value (1,000 dollars)		
Korea's exports to the United States	87,032	94,276	73,354
Korea's exports to other major destination markets.--			
China	262,913	211,579	160,502
India	236,685	244,726	133,884
Indonesia	133,473	99,285	85,612
Thailand	92,053	66,372	64,339
Vietnam	46,582	42,079	38,321
Japan	67,586	62,845	38,107
Taiwan	27,363	29,619	25,015
Turkey	47,421	44,759	25,098
All other destination markets	303,987	253,992	179,184
Total Korea exports	1,305,096	1,149,534	823,416

Table continued on next page.

Table VII-8--Continued
ESBR: Korea's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
Korea's exports to the United States	1,043	946	728
Korea's exports to other major destination markets.--			
China	917	843	619
India	894	829	601
Indonesia	918	859	628
Thailand	979	865	631
Vietnam	915	859	612
Japan	1,068	967	755
Taiwan	867	795	574
Turkey	910	832	588
All other destination markets	1,021	939	691
Total Korea exports	953	875	643
	Share of quantity (percent)		
Korea's exports to the United States	6.1	7.6	7.9
Korea's exports to other major destination markets.--			
China	20.9	19.1	20.3
India	19.3	22.5	17.4
Indonesia	10.6	8.8	10.6
Thailand	6.9	5.8	8.0
Vietnam	3.7	3.7	4.9
Japan	4.6	4.9	3.9
Taiwan	2.3	2.8	3.4
Turkey	3.8	4.1	3.3
All other destination markets	21.7	20.6	20.3
Total Korea exports	100.0	100.0	100.0

Source: Official exports statistics under HTS subheading 4002.19 (include out-of-scope merchandise) as reported by Korea's Customs and Trade Development Institution in the GTIS/GTA database, accessed August 3, 2016.

THE INDUSTRY IN MEXICO

Overview

The Commission issued foreign producers' or exporters' questionnaires to one firm believed to produce and/or export ESBR from Mexico.[9] A useable response to the Commission's questionnaire was received from one firm: Negromex. This firm's exports to the United States accounted for approximately 63 percent of U.S. imports of ESBR from Mexico over the period being examined. According to estimates requested of the responding producer, the production of ESBR in Mexico reported in this Part of the report accounts for all of the overall production of ESBR in Mexico.[10] Table VII-9 lists the producer of ESBR in Mexico that responded to the Commission's questionnaire and certain 2015 summary data reported in response to Commission questionnaires.

Table VII-9
ESBR: Summary data on firms in Mexico, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Negromex	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

As presented in table VII-10, one producer in Mexico reported in its questionnaire response operational or organizational changes since January 1, 2013.

Table VII-10
ESBR: Reported changes in operations by firms in Mexico

* * * * * * *

Operations on ESBR

Table VII-11 presents information on the ESBR operations of the responding producers and exporters in Mexico. Capacity remained level, while production declined *** percent during 2013-15, and is projected to increase *** percent in 2016 and remain level in 2017. Capacity utilization declined from *** percent in 2013 to *** percent in 2015. Exports accounted for an increasing share of total shipments from *** percent in 2013 to *** percent

[9] These firms were identified through a review of information submitted in the petition and contained in *** records.

[10] Hearing transcript, p. 11 (Okun)

in 2015. Exports to the United States, Negromex's *** export market, increased *** percent between 2013 and 2014, then declined *** percent in 2015 (*** percent higher than in 2013), and are projected to decline *** percent in 2016 and increase *** percent in 2017.

Table VII-11
ESBR: Data for the producer in Mexico, 2013-15, January to June 2015, and January to June 2016 and projections for calendar years 2016 and 2017

* * * * * * *

Alternative products

As shown in table VII-12, Negromex also produced *** on the same equipment as ESBR.[11] These other products accounted for between *** percent of total production during the period examined.

Table VII-12
ESBR: Mexican producers' overall capacity and production on the same equipment as subject production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Exports

According to GTA, the top export markets for ESBR from Mexico during 2013-15, were the United States (57.2 percent), followed by Belgium (11.9 percent) and Spain (6.6 percent) (table VII-13).

[11] Negromex stated that ***, affects its ability to shift between products.

Table VII-13
ESBR: Mexico's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Mexico's exports to the United States	141,472	143,225	130,108
Mexico's exports to other major destination markets.--			
Belgium	22,391	24,788	27,035
Spain	22,708	19,259	15,068
China	10,949	13,796	12,446
Brazil	8,252	7,005	7,154
Costa Rica	7,162	7,865	5,436
Singapore	580	1,109	3,590
Colombia	5,938	4,235	3,297
Taiwan	3,055	3,300	2,613
All other destination markets	36,710	127,591	20,767
Total Mexico exports	259,218	352,172	227,513
	Value (1,000 dollars)		
Mexico's exports to the United States	138,177	154,650	109,459
Mexico's exports to other major destination markets.--			
Belgium	26,111	27,867	24,215
Spain	20,870	17,924	10,201
China	12,001	13,791	10,711
Brazil	10,681	8,674	7,936
Costa Rica	7,708	8,266	3,953
Singapore	757	1,229	3,305
Colombia	7,337	5,187	2,737
Taiwan	3,817	3,892	2,692
All other destination markets	40,394	26,866	17,565
Total Mexico exports	267,853	268,344	192,774

Table continued on next page.

Table VII-13--Continued
ESBR: Mexico's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
Mexico's exports to the United States	977	1,080	841
Mexico's exports to other major destination markets.--			
Belgium	1,166	1,124	896
Spain	919	931	677
China	1,096	1,000	861
Brazil	1,294	1,238	1,109
Costa Rica	1,076	1,051	727
Singapore	1,304	1,108	921
Colombia	1,236	1,225	830
Taiwan	1,249	1,179	1,031
All other destination markets	1,100	211	846
Total Mexico exports	1,033	762	847
	Share of quantity (percent)		
Mexico's exports to the United States	54.6	40.7	57.2
Mexico's exports to other major destination markets.--			
Belgium	8.6	7.0	11.9
Spain	8.8	5.5	6.6
China	4.2	3.9	5.5
Brazil	3.2	2.0	3.1
Costa Rica	2.8	2.2	2.4
Singapore	0.2	0.3	1.6
Colombia	2.3	1.2	1.4
Taiwan	1.2	0.9	1.1
All other destination markets	14.2	36.2	9.1
Total Mexico exports	100.0	100.0	100.0

Source: Official exports statistics under HTS subheading 4002.19 (include out-of-scope merchandise) as reported by Mexico's National Institute of Statistics and Geography (INEGI) the GTIS/GTA database, accessed August 3, 2016.

THE INDUSTRY IN POLAND

Overview

The Commission issued foreign producers' or exporters' questionnaires to two firms believed to produce and/or export ESBR from Poland.[12] Useable responses to the Commission's questionnaire were received from one firm: Synthos. Synthos' exports to the United States accounted for all U.S. imports of ESBR from Poland over the period being examined. According to estimates requested of the responding producer, the production of ESBR in Poland reported in this Part of the report accounts for *** of the overall production of ESBR in Poland. Table VII-14 lists the producer of ESBR in Poland that responded to the Commission's questionnaire and certain 2015 summary data reported in response to Commission questionnaires.

Table VII-14
ESBR: Summary data on firms in Poland, 2015

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Synthos	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Changes in operations

Synthos did not report in its questionnaire response any operational or organizational changes since January 1, 2013.

Operations on ESBR

Table VII- 15 presents information on the ESBR operations of the responding producers and exporters in Poland. Capacity increased *** percent in 2014, remained at the same level in 2015, and is projected to remain at that level in 2016 and 2017. Production increased *** percent in 2014 and then declined *** percent in 2015, ending *** percent lower than in 2013. Production is projected to increase *** percent in 2016 and remain at that approximate level in 2017. Capacity utilization declined from *** percent in 2013 to *** percent in 2015, and is projected to increase to *** percent in 2016 and 2017. Exports accounted for approximately *** percent of total shipments in 2013-15 and are projected to increase to approximately *** percent of total shipments in 2016 and 2017. The *** exports were to markets other than the United States, principally ***. Exports to the United States increased from *** percent of total shipments in 2013 to *** percent in 2014, declined to *** percent in 2015, and are projected to be *** percent in 2016 and 2017. Synthos stated that ***.

[12] These firms were identified through a review of information submitted in the petition and contained in *** records.

Table VII-15
ESBR: Data for producers in Poland, 2013-15, January to June 2015, and January to June 2016 and projections for calendar years 2016 and 2017

* * * * * * *

Alternative products

As shown in table VII-16, Synthos produces *** on the same equipment as ESBR. Product shifting is limited by ***.

Table VII-16
ESBR: Polish producers' overall capacity and production on the same equipment as subject production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Exports

According to GTA (table VII-17), the top export markets for ESBR from Poland during 2013-15 included China (24.0 percent in 2015), India (11.4 percent), and Germany (10.6 percent). In 2015, the United States accounted for 1.2 percent to total exports from Poland.

Table VII-17
ESBR: Poland's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (1,000 pounds)		
Poland's exports to the United States	254	7,319	4,896
Poland's exports to other major destination markets.--			
China	72,399	65,504	95,525
India	73,571	63,623	45,399
Germany	24,882	32,066	42,174
Brazil	33,618	39,634	17,373
Italy	9,615	11,238	16,683
Turkey	21,421	20,099	14,533
Romania	21,197	13,546	12,947
Serbia	5,596	1,489	12,815
All other destination markets	102,714	108,030	135,094
Total Poland exports	365,266	362,548	397,439
	Value (1,000 dollars)		
Poland's exports to the United States	237	6,011	2,746
Poland's exports to other major destination markets.--			
China	60,775	50,571	48,937
India	61,843	49,455	23,765
Germany	25,887	31,755	27,992
Brazil	33,585	35,768	10,667
Italy	9,576	9,801	10,825
Turkey	22,121	19,013	9,722
Romania	21,599	12,473	8,239
Serbia	5,896	1,341	8,375
All other destination markets	100,566	98,672	84,903
Total Poland exports	342,084	314,861	236,171

Table continued on next page.

Table VII-17--Continued
ESBR: Poland's exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Unit value (dollars per 1,000 pounds)		
Poland's exports to the United States	932	821	561
Poland's exports to other major destination markets.--			
China	839	772	512
India	841	777	523
Germany	1,040	990	664
Brazil	999	902	614
Italy	996	872	649
Turkey	1,033	946	669
Romania	1,019	921	636
Serbia	1,054	901	654
All other destination markets	979	913	628
Total Poland exports	937	868	594
	Share of quantity (percent)		
Poland's exports to the United States	0.1	2.0	1.2
Poland's exports to other major destination markets.--			
China	19.8	18.1	24.0
India	20.1	17.5	11.4
Germany	6.8	8.8	10.6
Brazil	9.2	10.9	4.4
Italy	2.6	3.1	4.2
Turkey	5.9	5.5	3.7
Romania	5.8	3.7	3.3
Serbia	1.5	0.4	3.2
All other destination markets	28.1	29.8	34.0
Total Poland exports	100.0	100.0	100.0

Source: Official exports statistics under HTS subheading 4002.19 (include out-of-scope merchandise) as reported by EuroStat the GTIS/GTA database, accessed August 3, 2016.

THE COMBINED INDUSTRIES IN THE SUBJECT COUNTRIES

Table VII-18 presents information on the ESBR operations of the responding producers and exporters in all responding subject countries combined for 2013-15, January to June 2015, and January to June 2016, as well as projections for 2016-17.

Table VII-18
ESBR: Data on combined industries in subject countries, 2013-15, January to June 2015, and January to June 2016 and projection calendar years 2016 and 2017

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-19 presents data on U.S. importers' reported inventories of ESBR. Inventories of imports from subject sources increased *** percent between 2013 and 2014 and then declined *** percent in 2015, ending *** percent higher than in 2013.

Table VII-19
ESBR: U.S. importers' inventories, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of ESBR after December 31, 2015. Ten importers did so (table VII-20).

Table VII-20
ESBR: Arranged imports, January 2016 through December 2016

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Exports of ESBR from Poland to Brazil were potentially subject to antidumping duties as of November 20, 2015, but Brazil determined for public interest reasons to suspend the application of any measure. Brazil's antidumping orders on ESBR from Korea were reportedly terminated as of June 16, 2016.[13] Also, in January 2016, India initiated an antidumping duty action on 1500 and 1700 SBR grades originating in or exported from the EU (which includes ESBR from Poland), Korea, and Thailand.[14] [15] The government of Mexico applied antidumping duties on imports of ESBR from Brazil from 1996 until May 28, 2016, after which the measure ended.[16]

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) 'to ensure that it is not attributing injury from other sources to the subject imports.'"[17]

Total global ESBR capacity as compared to other synthetic rubber products and the global totals are detailed in Table VII-21. ESBR is the leading source of global synthetic rubber capacity, and during the 2013-15 period amounted to an average of *** pounds, or about *** percent of the global synthetic rubber capacity total of *** pounds. Projections for the three year period encompassing 2015-18 reflect *** in ESBR capacity from the current *** pound total, while total synthetic rubber capacity is projected to *** by an additional *** percent during the period. Solution SBR (SSBR), a competitive product, is projected to *** during the three year forecast period, from *** billion pounds in 2015 to *** pounds in 2018. During the period 2010-13, global ESBR capacity *** some *** percent to a *** pounds in 2013, but has remained at a relatively *** level of *** pounds thereafter,[18] owing to a protracted period of oversupply in which global capacity, particularly in China, continues to outstrip that of demand.[19] [20]

---

[13] LG Chemical's postconference brief, August 16, 2016, p. 5.

[14] Synthos' foreign producers'/exporters' questionnaire response, section II-9.

[15] Kumho 's foreign producers'/exporters/ questionnaire response, section II-9.

[16] ARLANXEO Brasil S.A. postconference brief, August 16, 2016, p. 2.

[17] *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867 (Fed. Cir. 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; *see also Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

[18] "Worldwide Rubber Statistics 2015," IISRP, p. 12.

[19] "IISRP executive warns of future overcapacity, " RubberNews.com, July 9, 2014.

[20] "SR prices, overcapacity pose challenge for industry," RubberNews.com, October 6, 2014.

Table VII-21
ESBR: Global synthetic rubber capacities by type of rubber, 2013-15 and forecasts for 2016-18

* * * * * * *

In April 2015, *** list was released by the *** highlighting several key elastomer sectors contributing to ***, including a *** percent *** capacity utilization rate.[21] Global ESBR capacity utilization rates according to IHS Chemical data reported for the 1995-2015 period show that *** rates were achieved in the *** percent range during the 2004 -2007 period, with an *** percent maximum reached in ***; the remaining years were in the *** percent range until rates *** into the *** percent range during the 2012-15 period.[22]

The data of Table VII-22 detail global ESBR capacities by subject and nonsubject countries, together with the United States. Nonsubject country capacity in 2015 totaled *** billion pounds, or *** percent of the global total; subject country capacity, *** pounds, *** percent; and the United States, *** pounds or *** percent. Global ESBR capacity is *** by nonsubject *** with *** pounds, or *** percent of the global total. Other nonsubject *** countries, ***, as shown, together with the addition of ***, account for another *** pounds of nonsubject *** capacity, or *** percent of total global capacity. Thus, nonsubject *** capacity in total accounts for about *** percent of global ESBR capacity.

China and the other nonsubject Asian countries are *** Europe with a little over *** billion pounds of ESBR capacity, including *** pounds of nonsubject capacity amounting to about *** percent of the global ESBR total. Russia accounts for another *** pounds of nonsubject capacity, or about *** percent of total global ESBR. The nonsubject countries of the Mideast and Africa, and *** in Latin America, in aggregate, account for about *** pounds, or some *** percent of total global ESBR capacity. [23]

U.S. imports of ESBR from China and other nonsubject Asian countries are currently relatively minor, and also from other nonsubject countries except for Germany, which in 2015 shipped baled ESBR having a Customs value of $24.2 million, or 30 percent of total U.S. imports of baled ESBR ($81.0 million). [24]

Table VII-22
ESBR: Global ESBR capacity by source, 2013-15

* * * * * * *

[21] "Executive Summary, Worldwide Rubber Statistics 2015," IISRP, p.2.

[22] "Styrene-Butadiene Elastomers (SBR)," Chemical Economics Handbook, IHS Chemical, December 2015, p.19.

[23] "Worldwide Rubber Statistics 2015," IISRP, p.32.

[24] USITC Dataweb, HTS 4002.19.00.15, August 2016.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
81 FR 49262, July 27, 2016	*Emulsion Styrene-Butadiene Rubber From Brazil, Korea, Mexico, and Poland; Institution of Antidumping Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-27/pdf/2016-17713.pdf
81 FR 55438, August 10, 2016	*Emulsion Styrene-Butadiene Rubber From Brazil, the Republic of Korea, Mexico, and Poland: Initiation of Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2016-08-19/pdf/2016-19769.pdf

APPENDIX B

CALENDAR OF THE PUBLIC STAFF CONFERENCE

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Emulsion Styrene-Butadiene Rubber from Brazil, Korea, Mexico, and Poland

Inv. Nos.: 731-TA-1334-1337 (Preliminary)

Date and Time: August 11, 2016 - 9:30 a.m.

Sessions were held in connection with these preliminary phase investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (**Matthew T. McGrath**, Barnes, Richardson & Colburn, LLP)
Respondents (**Deanna Tanner Okun**, Adduci, Mastriani & Schamberg, L.L.P.)

In Support to the Imposition of Antidumping Duty Orders:

Barnes, Richardson & Colburn, LLP
Washington, DC
on behalf of

Lion Elastomers LLC ("Lion")
East West Coplymers ("EW")

Jesse Zeringue, President *and* Chief Financial Officer, Lion

Steve Isaacs, Optimization Manager, Lion

Gregory Nelson, President *and* Chief Executive Officer, EW

Robert Rikhoff, Vice President of Operations, EW

Amy H. Warlick, Economist, Barnes Global Trade LLC

Matthew T. McGrath) – OF COUNSEL

In Opposition of the Imposition of
Antidumping Duty Orders:

Adduci, Mastriani & Schamberg, L.L.P.
Washington, DC
on behalf of

Industrias Negomex, S.A. de C.V. ("Negromex")
INSA LLC ("INSA")

Álvaro Gómez-Godoy, Legal Coordinator, Negromex

Tomas Acevedo, Commercial Director, INSA

Jose Plaza, Commercial Manager (America), INSA

Daniela Quintero, Commercial Intelligence Manager, INSA

Herfried Wöss, Outside Trade Counsel for Negromex,
Wöss & Partners, S.C.

William C. Sjoberg)
) – OF COUNSEL
Deanna Tanner Okun)

REBUTTAL/CLOSING REMARKS:

Petitioners (**Matthew T. McGrath**, Barnes, Richardson & Colburn, LLP *and* **Jesse Zeringue**, Lion Elastomers LLC) 10 minutes

Respondents (**William C. Sjoberg** *and* **Deanna Tanner Okun**, Adduci, Mastriani & Schamberg, L.L.P.) 10 minutes

APPENDIX C

SUMMARY DATA

Table C-1
ESBR: Summary data concerning the U.S. total market, 2013-15, January to June 2015, and January to June 2016
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. total market consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Brazil	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***
Poland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. total market consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Brazil	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***
Poland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--									
Brazil:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Mexico:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Poland:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
China									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Gernany:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***

Table continued.

Table C-1--Continued
ESBR: Summary data concerning the U.S. market, 2013-15, January to June 2015, and January to June 2016
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
		Calendar year		January to June			Calendar year		Jan-Jun
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. importers' U.S. shipments of imports from.--									
All import sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Table C-2
ESBR: Summary data concerning the U.S. merchant market, 2013-15, January to June 2015, and January to June 2016
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per 1,000 pounds; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. merchant market consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Brazil	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***
Poland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. merchant market consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Brazil	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Mexico	***	***	***	***	***	***	***	***	***
Poland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. producers':									
Commercial U.S. shipments									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Net commercial sales (fn3):									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

fn3.--***

APPENDIX D

U.S. PRODUCERS' AND U.S. IMPORTERS' U.S. SHIPMENTS BY GRADE

Tables D-1 through D-10 are confidential in their entirety.