

LOST SALES AND LOST REVENUE SURVEY

MULTIFUNCTIONAL ACRYLATE AND METHACRYLATE MONOMERS, AND ACRYLATED BISPHENOL-A EPOXY BASED OLIGOMERS ("MAMMOs") FROM SOUTH KOREA AND TAIWAN

This survey must be received by the Commission by **April 10, 2025**

See last page for instructions regarding how to file this questionnaire.

The information called for in this survey is for use by the United States International Trade Commission in connection with its countervailing duty and antidumping duty investigations concerning multifunctional acrylate and methacrylate monomers, and acrylated bisphenol-A epoxy based oligomers ("MAMMOs") from South Korea and Taiwan (Inv. Nos. 701-TA-759 and 731-TA-1740-1741 (Preliminary)). The information requested in the survey is requested under the authority of the Tariff Act of 1930, title VII. This report is mandatory and failure to reply as directed can result in a subpoena or other order to compel the submission of records or information in your possession (19 U.S.C. § 1333(a)). Further information on this survey can be obtained from Meryem Demirkaya (202-205-2323, meryem.demirkaya@usitc.gov).

Name of firm _____

Address _____

City _____ State _____ Zip Code _____

Website _____

Has your firm purchased MAMMOs from any source (domestic or foreign), or imported MAMMOs for {your own internal consumption, at any time since January 1, 2022?

☐ **NO** (Sign the certification below and promptly return **only** this page of the survey to the Commission)

☐ **YES** (Complete all parts of the survey, and return the entire survey to the Commission)

Return questionnaire via the Commission's secure portal by clicking on the following link:
<https://usitc.gov/qportal>. (PIN: **MAMMO**, PHASE: **Preliminary**). See last page for detailed instructions.

CERTIFICATION

I certify that the information herein supplied in this survey is complete and correct to the best of my knowledge and belief and understand that the information submitted is subject to audit and verification by the Commission. By submitting this certification I also grant consent for the Commission, and its employees and contract personnel, to use the information provided in this survey and throughout this proceeding in any other import-injury proceedings conducted by the Commission on the same or similar merchandise.

I, the undersigned, acknowledge that information submitted in response to this request for information and throughout this investigation or other proceeding may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. I understand that all contract personnel will sign appropriate nondisclosure agreements.

Name of Authorized Official

Title of Authorized Official

Date

Signature

Phone

Email address

GENERAL INFORMATION

Background. This proceeding was instituted in response to petitions filed on March 27, 2025, by Arkema, Inc., King of Prussia, Pennsylvania. Countervailing and antidumping duties may be assessed on the subject imports as a result of these proceedings if the Commission makes an affirmative determination of injury, threat, or material retardation, and if the U.S. Department of Commerce (“Commerce”) makes an affirmative determination of subsidization and dumping. Pertinent information to this proceeding is available at:

Questionnaires: https://usitc.gov/reports/active_import_injury_questionnaires.

Other case information: <https://ids.usitc.gov/case/8275/investigation/8726>

MAMMOs covered by this proceeding are certain multifunctional acrylate and methacrylate monomers, and acrylated bisphenol-A epoxy based oligomers (collectively, “multifunctional acrylate- and methacrylate-based monomers and oligomers or “MAMMOs”) that are derived from chemical reactions involving the use of acrylic or methacrylic acid. Products within the scope are listed below and have the following Chemical Abstracts Service (“CAS”) numbers:

CAS Number	Description	Molecular Formula
109-16-0	Triethylene glycol dimethacrylate (TEGDMA)	C ₁₄ H ₂₂ O ₆
13048-33-4	1,6-hexanediol diacrylate (HDDA)	C ₁₂ H ₁₈ O ₄
42978-66-5	Tripropylene glycol diacrylate (TPGDA)	C ₁₅ H ₂₄ O ₆
3290-92-4	Trimethylol-propane trimethacrylate (TMPTMA)	C ₁₈ H ₂₆ O ₆
15625-89-5	Trimethylolpropane triacrylate (TMPTA)	C ₁₅ H ₂₀ O ₆
28961-43-5	Ethoxylated (3) trimethylolpropane triacrylate (EOTMPTA)	(C ₂ H ₄ O) _n (C ₂ H ₄ O) _n (C ₂ H ₄ O) _n C ₁₅ H ₂₀ O ₆
57472-68-1	Dipropylene glycol diacrylate (DPGDA)	C ₁₂ H ₁₈ O ₅
55818-57-0	Bisphenol-A-epichlorohydrin copolymer acrylate (EPOXY ACRYLATE)	(C ₁₅ H ₁₆ O ₂ .C ₃ H ₅ ClO) _x .xC ₃ H ₄ O ₂

The monomers are generally known as multifunctional acrylates (“MFAs”) or multifunctional methacrylates (“MFMA”) depending on whether the functional groups are acrylate or methacrylate. The monomers generally contain stabilizers and inhibitors. The monomers are either Di-functional or Tri-functional (having 2 or 3 functional groups/molecule), have viscosities of 9 to 15cPs (if di-functional) or ranging from 45 to 110 cPs at 25 deg C (if trifunctional), have (meth)acrylate equivalent weights (molecular weight/# of functional groups) between 99 and 150 and molecular weights between 226 and 428 gms/mol.

The acrylated bisphenol-A epoxy based oligomer is commonly referred to as epoxy acrylate or acrylated epoxy. In contrast to epoxy resin, the main characteristic of the epoxy acrylate oligomer is that it

contains acrylate functional groups which make them curable by free-radical polymerization. The epoxy acrylate generally contains stabilizers and inhibitors. The epoxy acrylate has a molecular weight of 518 gms/mol and a viscosity of 2400 to 3600 cPs at 65 deg C.

Certain monomers and oligomers are subject to the scope even if an in-scope monomer or oligomer is blended or mixed with one or more other in-scope monomer or oligomer.

Certain monomers and oligomers in blends or mixtures are also subject to the scope if the blend or mixture matches any of the following descriptions, so long as the blend or mixture contains no less than 20% by weight of in-scope CMOs:

- (1) Blends with out-of-scope monomers, epoxy acrylates, or with other acrylate or methacrylate oligomers based on polyester, polyurethane, acrylic, or modified epoxy acrylate structures.
- (2) Blends with inert (non-reactive) polymers, or other types of curable oligomers, such as epoxy resins (aromatic or aliphatic glycidyl ethers or esters, epoxidized vegetable oils, cycloaliphatic epoxies, epoxidized polydienes), unsaturated polyesters, maleimide resins, vinyl esters, or allylic resins.
- (3) Blends with non-curable solvents.
- (4) Blends that additionally contain ingredients, including but not limited to insoluble organic or inorganic fillers, pigments, dyes, rheology modifiers, UV stabilizers, light absorbers, plasticizers, flame retardants, toughening agents or other materials intended to affect the properties of a final cured article.

The scope includes merchandise matching the above description that has been processed in a third country, including by commingling, diluting, introducing, or removing ingredients, or performing any other processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the subject country.

The scope also includes CMOs that are commingled, mixed or blended with in-scope product from sources not subject to these investigations.

Only the subject component(s) of such blends, mixtures or commingled products described above is covered by the scope of these investigations. Subject merchandise contained in a blended, mixed or commingled product described above will not have undergone a chemical reaction as a result of being blended, mixed or commingled.

Notwithstanding the above, specifically excluded from the scope are downstream products, including but not limited to, inks, coatings and overprint varnishes. For purposes of this exclusion, the downstream product requires only the application of energy to be cured, e.g. inks or varnish applied to packaging, coatings applied to wood flooring, etc. The energy source required to cure the downstream product to its substrate can be thermal, ultraviolet radiation, visible light, electron beam radiation, or infrared radiation.

Also excluded from the scope of this investigation are all products covered by the scope of the antidumping and countervailing duty proceedings on Certain Epoxy Resins from the Republic of Korea and Taiwan. *See Certain Epoxy Resins From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Negative Critical Circumstances Determination, Postponement of Final Determination, and Extension of Provisional Measures*, 89 FR 89605 (November

13, 2024); *see also Certain Epoxy Resins From the Republic of Korea: Amended Preliminary Affirmative Determination of Less-Than-Fair-Value Investigation*, 89 FR 100972 (December 13, 2024); *Certain Epoxy Resins From Taiwan: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*, 89 FR 89591 (November 13, 2024); *Certain Epoxy Resins From the Republic of Korea: Preliminary Negative Countervailing Duty Determination, Preliminary Negative Critical Circumstances Determination and Alignment of Final Determination With Final Antidumping Duty Determination*, 89 FR 74912 (September 13, 2024); and *Certain Epoxy Resins From Taiwan: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination With Final Antidumping Duty Determination*, 89 FR 74896 (September 13, 2024).

MAMMOs are currently imported under statistical reporting numbers 2916.12.5050, 2916.14.2050, 3824.99.2900, 3907.29.0000 and 3907.30.0000 of the Harmonized Tariff Schedule of the United States (HTSUS). They may also be imported under HTSUS statistical reporting numbers 2916.12.1000, 3824.99.9397, 3909.50.5000, and 3909.99.5050. The HTSUS provisions are for convenience and customs purposes; the written description of the scope is dispositive.

1,000 pounds contained MAMMOs. Report quantity for any product that is in-scope, as defined on pp. 2 to 4 of the questionnaire, including the individual MAMMOs and any blends containing at least 20% of those individually identified MAMMOs. For blends, however, only report the quantity of the individual MAMMOs contained in the blends and exclude the weight of any out-of-scope molecules or other non-MAMMO additives. Quantity data are also being asked for in terms of 1,000 pounds. This means that if your firm had, for example, two-hundred and forty thousand pounds of sales of MAMMOs (240,000 pounds) that data would be reported as “240” in the relevant form field (i.e., the quantity as measured in pounds divided by 1,000).

Reporting of information.-- If information is not readily available from your records, provide carefully prepared estimates.

Confidentiality.--The data furnished in response to this survey that reveal the individual operations of your firm will be treated as confidential by the Commission to the extent that such data are not otherwise available to the public and will not be disclosed except as may be required by law (*see* 19 U.S.C. 1677f). Such confidential information will not be published in a manner that will reveal the individual operations of your firm; however, general characterizations of numerical business proprietary information (such as discussion of trends) will be treated as confidential business information only at the request of the submitter for good cause shown.

Release of information.--The information provided by your firm in response to this survey, as well as any other business proprietary information submitted by your firm to the Commission in connection with this proceeding, may become subject to, and released under, the administrative protective order provisions of the Tariff Act of 1930 (19 U.S.C. § 1677f) and section 207.7 of the Commission’s Rules of Practice and Procedure (19 CFR § 207.7). This means that certain lawyers and other authorized individuals may temporarily be given access to the information for use in connection with this proceeding or other import-injury proceedings conducted by the Commission on the same or similar merchandise; those individuals would be subject to severe penalties if the information were divulged to unauthorized individuals. Please also retain a copy of the final document that you submit.

Contact information.--Please identify the responsible individual and the manner by which Commission staff may contact that individual regarding the confidential information submitted in this survey. This may or may not be the person whose signature is at the bottom of page 1.

Name	
Title	
Email	
Telephone	

Firms operating more than one establishment should combine the data for all establishments into a single response.

PURCHASE INFORMATION

1. **Purchases and imports.**— Report separately your firm's domestic purchases and imports of MAMMOs.

"Purchase"— Purchase from a U.S. entity, such as a U.S. producer, a U.S. importer, or other U.S. firm.

"Import"— Purchase directly from a foreign supplier, and your firm is the importer of record.

Item	2022	2023	2024
	Quantity (in 1,000 pounds contained MAMMOs)		
Purchases of MAMMOs produced in—			
United States			
South Korea			
Taiwan			
All other sources ¹			
Sources unknown ²			
Total purchases	0	0	0
Imports of MAMMOs from—			
South Korea			
Taiwan			
All other sources ¹			
Total imports ³	0	0	0
¹ Please identify these sources: ² Please indicate the firm(s) from which you purchased this merchandise: ³ If your firm imported MAMMOs at any time since January 1, 2022, please also complete and return a U.S. importers' questionnaire in this proceeding.			

2. **Changes in purchasing patterns.**— Please indicate whether the shares of your firm’s purchases of MAMMOs steadily increased, fluctuated but ended higher, were constant, fluctuated but ended lower, or steadily decreased since January 1, 2022 from the listed sources.

Select one box per row.

[illegible]

3. Purchasing subject imports rather than domestic products.—

- (a) Since January 1, 2022, did your firm import and/or purchase imports of MAMMOs from South Korea or Taiwan instead of purchasing U.S.-produced MAMMOs? Respond for each subject source.

Source	Yes (also respond to parts (b) and (c))	No (If “No” for all sources, skip to next question)
South Korea	<input type="checkbox"/>	<input type="checkbox"/>
Taiwan	<input type="checkbox"/>	<input type="checkbox"/>

- (b) If you responded “Yes” to part (a), was the imported product priced lower than the domestic product?

Source	Yes	No
South Korea	<input type="checkbox"/>	<input type="checkbox"/>
Taiwan	<input type="checkbox"/>	<input type="checkbox"/>

- (c) If you responded “Yes” to part (a), was price a primary reason for importing and/or purchasing subject imports rather than domestic product?

Source	Yes	If Yes, estimate the quantity of imports purchased and/or imported instead of domestic product since January 1, 2022 (in 1,000 pounds contained MAMMOs)	Please list the years of these purchases/ imports (or state “all” if all years since January 1, 2022)	No	If No, please indicate the reason your firm imported and/or purchased imports instead of domestic product
South Korea	<input type="checkbox"/>			<input type="checkbox"/>	
Taiwan	<input type="checkbox"/>			<input type="checkbox"/>	
If the quantity reported above exceeds the total quantity reported in Question 1, please explain.					

4. **U.S. producers and import competition.**—

- (a) Since January 1, 2022, in connection with a sale or offer to sell MAMMOs to your firm, did U.S. producers reduce their prices of domestically produced MAMMOs in order to compete with lower-priced imports of MAMMOs from the subject countries? Respond for each subject source.

Source	Yes (also respond to question part (b))	No (If “No” for all sources, skip to next question)	Don’t know
South Korea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taiwan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (b) If your firm responded “yes” to any of the above sources, please provide an estimate of the reduction in U.S. producers’ prices and any additional explanations.

Source	Estimated reduction in U.S. prices (percent)	Additional explanation, including such information as timing (e.g., months/years), frequency of price reductions, or other market/competitive factors
South Korea	%	
Taiwan	%	

5. **Major purchasing factors.**--Please list, in order of their importance, the main factors your firm considers in deciding from whom to purchase MAMMOs.

1.	
2.	
3.	
Please list any other factors that are very important in your purchase decisions:	

6. **Other explanations**--Please provide any additional comments in this box.

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7. **Stock symbol information**-- If your firm or parent firm is publicly traded, please specify the stock exchange and trading symbol: _____.

8. **External counsel**-- If your firm or parent firm is represented by external counsel in relation to this proceeding, having filed an entry of appearance, please specify the name of the law firm and the lead attorney(s).

Law firm:	
Lead attorney(s):	

9. **Reporting requirements.**--Please report the actual number of hours required and the cost to your firm of completing this survey for use by the Office of Management and Budget.

Hours	Dollars

Public reporting burden for this survey is estimated to average 4 hours per response, including the time for reviewing instructions, gathering data, and completing and reviewing the survey.

We welcome comments regarding the accuracy of this burden estimate, suggestions for reducing the burden, and any suggestions for improving this questionnaire. Please provide such comments to the Office of Investigations, import_injury@usitc.gov.

HOW TO FILE YOUR SURVEY RESPONSE

Please do not attempt to modify the format or permissions of the survey document.

Please submit the completed survey using one of the methods noted below. If your firm is unable to complete the MS Word survey or cannot use one of the electronic methods of submission, please contact the Commission for further instructions.

- **Upload via Secure Drop Box.**— The questionnaire must be uploaded in two formats: (1) a Microsoft Word document; and (2) a PDF copy of the complete questionnaire with a signature on the first page. Please include any attachments at the end of the PDF (e.g., APO certification, additional comments, etc.).

Web address: <https://usitc.gov/qportal>

Pin: MAMMO **Phase:** Preliminary

- **E-mail.**— E-mail the MS Word questionnaire to meryem.demirkaya@usitc.gov; include a PDF copy of the complete questionnaire with a signature on the first page. Submitters are strongly encouraged to encrypt nonpublic documents that are electronically transmitted to the Commission to protect your sensitive information from unauthorized disclosure. The USITC secure submission portal and the Electronic Document Information System (EDIS) use Federal Information Processing Standards (FIPS) 140-2 cryptographic algorithms to encrypt data in transit. Submitting your nonpublic documents by a means that does not use these encryption algorithms (such as by email) may subject your firm's nonpublic information to unauthorized disclosure during transmission. If you choose a non-encrypted method of electronic transmission, the Commission warns you that the risk of such possible unauthorized disclosure is assumed by you and not by the Commission.

If your firm did not purchase this product, please fill out page 1, print, sign, and submit a scanned PDF copy via the Commission's secure submission portal or email.