Slip Op. 26-58

UNITED STATES COURT OF INTERNATIONAL TRADE

LANXESS CORPORATION, **Plaintiff,** **v.** **UNITED STATES,** **Defendant.**	**Before: Jennifer Choe-Groves, Judge** **Court No. 23-00073**

OPINION AND ORDER

[Denying Plaintiff's motion for summary judgment and granting in part and denying in part Defendant's cross-motion for summary judgment with respect to the classification of a proprietary formula of Axion CA 1330, a mixture in liquid form consisting of toluene, methylaluminoxane, and trimethylaluminum.]

Dated: June 9, 2026

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Justin R. Miller, Attorney-in-Charge, International Trade Field Office, and Marcella Powell, Senior Trial Counsel, Commercial Litigation Branch, Civil Division, U.S. Department of Justice, of New York, NY, for Defendant United States. With them on the brief were Brett A. Shumate, Assistant Attorney General, and Patricia M. McCarthy, Director. Of Counsel was Emma Tiner, Attorney, Office of the Assistant Chief Counsel for International Trade Litigation, U.S. Customs and Border Protection, of New York, NY.

Choe-Groves, Judge: This case addresses whether Axion CA 1330 ("Axion CA 1330" or "subject merchandise"), which is a mixture in liquid form consisting

of toluene, methylaluminoxane, and trimethylaluminum, is classifiable under three potential headings of the Harmonized Tariff Schedule of the United States ("HTSUS").[1] The Court examines whether Axion CA 1330 is classifiable under: (1) HTSUS subheading 3208.90.00 as a paint or varnish (pursuant to NY Ruling Letter N128896 (Nov. 10, 2010)) (with a duty rate of 3.2% *ad valorem*); (2) HTSUS subheading 3815.19.00 as a supported catalyst (Plaintiff's preferred classification) (with a duty rate of 0% *ad valorem*); or (3) HTSUS subheading 3824.99.28 as a preparation of the chemical or allied industries (Defendant's preferred classification) (with a duty rate of 6.5% *ad valorem*).

Before the Court are cross-motions for summary judgment. Pl.'s Mot. Summ. J. & Mem. Law Supp. Pl.'s Mot. Summ. J. ("Plaintiff's Motion for Summary Judgment" or "Pl.'s Br."), ECF No. 39; Def.'s Cross Mot. Summ. J. & Mem. Law Supp. & Opp'n Pl.'s Mot. Summ. J. ("Defendant's Cross-Motion for Summary Judgment" or "Def.'s Br."), ECF No. 42. LANXESS Corporation ("Plaintiff" or "Lanxess") argues that Axion CA 1330 is classifiable as a

[1] The subject merchandise at issue were subject to the tariff provisions set forth in the version of the HTSUS that was in effect on the dates of entry. References to the HTSUS herein are to the 2020 version. See Nutricia North America, Inc. v. United States, 159 F.4th 1344, 1349 (Fed. Cir. 2025) (affirming the U.S. Court of International Trade's decision to refer to HTSUS provisions that were in effect on the dates of entry); see Nutricia North America, Inc. v. United States, 47 CIT __, __, 666 F. Supp. 3d 1363, 1369 n.2 (2023), rev'd and remanded on other grounds, 159 F.4th 1344 (Fed. Cir. 2025).

"supported catalyst" under HTSUS subheading 3815.19.00. Pl.'s Br. at 9–16. The United States ("Defendant" or "the Government") counters that the subject merchandise are classifiable under HTSUS subheading 3824.99.28, as a preparation of the chemical or allied industries. Def.'s Br. at 22–24.

For the reasons that follow, the Court denies Plaintiff's Motion for Summary Judgment and grants in part and denies in part Defendant's Cross-Motion for Summary Judgment.

UNDISPUTED FACTS

The Court finds that the following facts are undisputed:

I. Procedural History

LANXESS Solutions U.S. Inc. (formerly Chemtura Corp.) was merged into LANXESS Corporation on October 1, 2020. Joint Statement of Material Facts Not in Dispute ("Joint Statement Facts") at ¶ 1, ECF No. 58. The subject merchandise at issue in this case, Axion CA 1330, were imported in 22 entries made at the ports of Norfolk, VA, Baltimore, MD, and Houston, TX, from June through November 2020. Id. at ¶ 2; Protest No. 1303-21-103455, ECF No. 7-1; Protest No. 1401-21-106422, ECF No. 7-2.[2] LANXESS Corporation (importer number 26-008195000)

[2] The dates of the 22 entries are covered by eleven different HTSUS 2020 Revisions. See Protest No. 1303-21-103455; Protest No. 1401-21-106422. The Court notes that the tariff provisions at issue and the duties they carry remained consistent throughout the HTSUS 2020 Revisions.

was the importer of record of the entries covered by protest #1401-21-106422, and LANXESS Solutions U.S. Inc. (importer number 52-218315300) was the importer of record of the entries covered by protest #1303-21-103455. Id. at ¶¶ 3–4; Protest No. 1303-21-103455; Protest No. 1401-21-106422. Lanxess filed both protests and is a specialty chemical company that is part of the chemical industry, and its customers are also part of that industry. Id. at ¶¶ 5, 49.

II. Description of Subject Merchandise

The subject merchandise are a proprietary formula of Axion CA 1330, which is a mixture in liquid form consisting of between 50–70% toluene (CAS-No 108-88-3), between 30–50% methylaluminoxane (CAS-No 308062-01-03) ("MAO"), and between 1–5% of trimethylaluminum ("TMA"). Id. at ¶ 6. This formula is stated in the Material Safety Data Sheet for Axion CA 1330. Id. at ¶ 7. MAO is an ill-defined mixture of organoaluminium compounds with the approximate formula (0x-Al-Mey)n as the amount of oxygen and methyl groups and the types of MAO vary (Me is a methyl group, with the formula -CH3). Id. at ¶ 8. The different oligomers of MAO vary in size and stoichiometry. Id. Most, but not all, of the components of MAO have not been unambiguously identified. Id. As a mixture of oligomers, MAO is not a separate chemically defined organic compound. Id. at ¶ 9. Organoaluminium products react with air and water, and special shipping, handling, and storage procedures are required. Id. at ¶ 10.

Organoaluminium materials generally are protected with an inert nitrogen atmosphere. Id. Low moisture (< 3.5 mg/m3) and oxygen (< 0.001 vol %) contents are recommended. Id.

In its condition as imported, Axion CA 1330 is not a reaction initiator. Id. at ¶ 46. "Reaction accelerator" is a synonym for "catalyst." Id. at ¶ 47. Axion CA 1330 is not a paint or a varnish. Id. at ¶ 48. Axion CA 1330 (a/k/a MAO) can be described as an organometallic product or organoaluminium product. Id. at ¶ 11. MAO is produced by the addition of water to TMA, and the amounts of O (oxygen) and Me are controlled by the ratio of TMA to water and how the water is added. Id. at ¶ 12. Axion CA 1330, in its condition as imported, contains more than five percent by weight of the aromatic substance toluene. Id. at ¶¶ 13–14. Toluene keeps the MAO in Axion CA 1330 suitable for use in the supported catalyst system, and Axion CA 1300 is used in a supported catalyst system for the polymerization of polyolefins. Id. at ¶¶ 15–16. Lanxess knows of no other commercial use of Axion CA 1330. Id. at ¶ 17.

A. Polymerization of Polyolefins

Polymerization is a chemical reaction in which two or more molecules combine to form larger molecules that contain repeating structural units. Id. at ¶ 18. Polyolefins are a family of thermoplastics that include polyethylene and polypropylene, and are produced by polymerizing the olefins ethylene and

propylene, respectively. Id. at ¶ 19. Olefin polymerization involves cutting existing carbon-carbon double bonds in the olefin monomer and then reconnecting them as single bonds linking the olefins together in long hydrocarbon chains. Id. at ¶ 20.

The cutting and reconnecting of the carbon atoms requires the use of a catalyst, which accelerates the chemical reaction, and various catalysts are used in olefin polymerization. Id. at ¶¶ 21–22. The type of catalyst system and the reaction conditions determine the characteristics of the resulting polyethylene and polypropylene. Id. at ¶ 23. Some catalyst systems used in olefin polymerization consist of two active components, which may be described as a catalyst and a catalyst activator on a support. Id. at ¶ 24. A catalyst is a substance that enables a chemical reaction to proceed at a faster rate or under different conditions (as at a lower temperature) than otherwise possible, without itself being consumed. Id. at ¶ 25.

B. Supported Catalyst System

One type of supported catalyst system used in olefin polymerization is called a Ziegler-Natta catalyst. Id. at ¶ 26. In olefin polymerization using the Ziegler-Natta system, a titanium compound on a magnesium chloride support is introduced into the reactor, and triethyl aluminum is separately introduced into the reactor. Id. In the reactor, the titanium compound is activated by triethyl aluminum, and the

result of this reaction is catalytically active. Id. Prior to the two materials coming together in the reactor, neither is catalytically active for the production of polyethylene. Id. Another type of supported catalyst system used in olefin polymerization is composed of Axion CA 1330 and a metallocene supported on silica gel, and the specific metallocene is selected by the polyolefin producer. Id. at ¶ 27.

Catalyst supports are non-reactive solid materials, which provide a base for active ingredients, such as metals used in catalysis. Id. at ¶ 28. Chemical substances that react with other chemical substances to convert them into a catalytically active form are called "catalyst activators" or "co-catalysts." Id. at ¶ 29. In its condition as imported, Axion CA 1330 is intended to be a component of a supported catalyst system and this supported catalyst system is made by mixing together into a slurry a metallocene proprietary to the polyolefin producer and silica gel, with toluene being removed by evaporation. Id. at ¶¶ 30–31. This mixture is then introduced into the reactor with the olefin. Id. at ¶ 31. Lanxess' U.S. customers combine Axion CA 1330 with a very small amount of a metallocene of their choice and the mixture must be supported to be used in a commercially viable polymerization gas phase process. Id. at ¶¶ 32–33. Silica gel is used as the support with the typical catalyst system being about 70–90% silica gel, less than 30% Axion CA 1330, and less than 1% metallocene by weight. Id. at

¶ 34. The silica gel is an inert carrier or support for the catalyst system that allows the even disbursement of the Axion CA 1330 and metallocene across a larger surface area compared to a dried Axion CA 1330 and metallocene mixture without silica gel. Id. at ¶ 35.

C. Role of Axion CA 1330

The role of Axion CA 1330 in the catalyst system consisting of Axion CA 1330, metallocene, and silica gel is fourfold: (1) it alkylates the metallocene compound, meaning that typically two chloride atoms on the metallocene are exchanged with a methyl group from Axion CA 1330 and remains MAO; (2) it extracts an alkyl group (-CH3) from the metallocene compound to generate an active cation and remains MAO; (3) it acts as a bulky, inert anion to the highly reactive transition metal cation where the compounds may not be separated, and the presence of both the anion Axion CA 1330 and the cation metallocene are required for the catalyst to work; and (4) it scavenges impurities from the polymerization reactor. Id. at ¶ 36. In its condition as imported, Axion CA 1330 is not catalytically active, cannot accelerate the rate of a chemical reaction, is not deposited on a support, and could be described as a catalyst activator or co-catalyst. Id. at ¶¶ 37–40.

Metallocenes are organometallic compounds containing metal atoms bonded to aromatic rings, and when Axion CA 1330 and the metallocene are combined, Axion CA 1330 activates the metallocene. Id. at ¶¶ 41–42.

In the supported catalyst system of which Axion CA 1330 is a component, the metallocene is catalytically activated by Axion CA 1330 and functions as the catalytic center in the polymerization of olefins, but is not consumed during the polymerization of olefins. Id. at ¶¶ 43–44. A reaction initiator can be used in bringing about polymerization, but unlike a catalyst, it is consumed during the ensuing reaction and reacts once with a monomer, which begins a chain reaction that creates a polymer molecule. Id. at ¶ 45. The reaction initiator is chemically changed and cannot initiate a second chain reaction. Id.

JURISDICTION AND STANDARD OF REVIEW

The Court has jurisdiction pursuant to 28 U.S.C. § 1581(a). The Court reviews classification cases de novo based on the record made before the Court. 28 U.S.C. § 2640(a); Cont'l Auto. Sys., Inc. v. United States, 46 CIT __, __, 589 F. Supp. 3d 1215, 1220 (2022); Telebrands Corp. v. United States, 36 CIT 1231, 1234, 865 F. Supp. 2d 1277, 1279–80 (2012).

The Court will grant summary judgment if "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." USCIT R. 56(a). To raise a genuine issue of material fact, a

party cannot rest upon mere allegations or denials and must point to sufficient supporting evidence for the claimed factual dispute to require resolution of the differing versions of the truth at trial. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248–49 (1986); Barmag Barmer Maschinenfabrik AG v. Murata Mach., Ltd., 731 F.2d 831, 835–36 (Fed. Cir. 1984).

DISCUSSION

I. Legal Framework

In a tariff classification dispute, "the court first considers whether 'the government's classification is correct, both independently and in comparison with the importer's alternative.'" Shamrock Bldg. Materials, Inc. v. United States, 47 CIT __, __, 619 F. Supp. 3d 1337, 1342 (2023) (quoting Jarvis Clark Co. v. United States, 733 F.2d 873, 878 (Fed. Cir. 1984)). The plaintiff has the burden of demonstrating that the government's classification is incorrect. Jarvis Clark Co., 733 F.2d at 876. Independent of the arguments presented, the Court has a statutory mandate to "reach a correct result." Id. at 878; see 28 U.S.C. § 2643(b).

A two-step process guides the Court in determining the correct classification of merchandise. Ford Motor Co. v. United States, 926 F.3d 741, 748 (Fed. Cir. 2019) (citing ADC Telecomms., Inc. v. United States, 916 F.3d 1013, 1017 (Fed. Cir. 2019)). First, the Court ascertains the proper meaning of the terms in the tariff provision. Schlumberger Tech. Corp. v. United States, 845 F.3d 1158, 1162 (Fed.

Cir. 2017) (citing Sigma-Tau HealthScience, Inc. v. United States, 838 F.3d 1272, 1276 (Fed. Cir. 2016)). Second, the Court determines whether the merchandise at issue falls within the terms of the tariff provision. Id. The former is a question of law, which the Court reviews de novo, and the latter is a question of fact, which the Court reviews for clear error. Id. "[W]hen there is no dispute as to the nature of the merchandise, then the two-step classification analysis 'collapses entirely into a question of law.'" Link Snacks, Inc. v. United States, 742 F.3d 962, 965–66 (Fed. Cir. 2014) (quoting Cummins Inc. v. United States, 454 F.3d 1361, 1363 (Fed. Cir. 2006)).

The classification of merchandise under the HTSUS is governed by the General Rules of Interpretation ("GRI") and, if applicable, the Additional U.S. Rules of Interpretation ("ARI"), which are both applied in numerical order. BenQ Am. Corp. v. United States, 646 F.3d 1371, 1376 (Fed. Cir. 2011) (citing N. Am. Processing Co. v. United States, 236 F.3d 695, 698 (Fed. Cir. 2001)). GRI 1 instructs that, "for legal purposes, classification shall be determined according to the terms of the headings and any relative section or chapter notes." GRI 1, HTSUS. "Absent contrary legislative intent, HTSUS terms are to be 'construed [according] to their common and popular meaning.'" Baxter Healthcare Corp. of P.R. v. United States, 182 F.3d 1333, 1337 (Fed. Cir. 1999) (alteration in original) (quoting Marubeni Am. Corp. v. United States, 35 F.3d 530, 533 (Fed. Cir. 1994)).

In construing the terms of the headings, the Court "may rely upon its own understanding of the terms used and may consult lexicographic and scientific authorities, dictionaries, and other reliable information sources." Carl Zeiss, Inc. v. United States, 195 F.3d 1375, 1379 (Fed. Cir. 1999) (citing Baxter Healthcare Corp. of P.R., 182 F.3d at 1337–38). The Court may also consult the Harmonized Commodity Description and Coding System's Explanatory Notes ("Explanatory Notes"), which "are not legally binding or dispositive," Kahrs Int'l, Inc. v. United States, 713 F.3d 640, 645 (Fed. Cir. 2013), but "provide a commentary on the scope of each heading of the Harmonized System" and are "generally indicative of proper interpretation of the various provisions." H.R. Rep. No. 100–576, at 549 (1988) (Conf. Rep.), as reprinted in 1988 U.S.C.C.A.N. 1547, 1582. See also E.T. Horn Co. v. United States, 367 F.3d 1326, 1329 (Fed. Cir. 2004).

II. Competing Tariff Provisions

The Court reviews classification cases de novo based on the record made before the Court. 28 U.S.C. § 2640(a). In a tariff classification dispute, "the court first considers whether 'the government's classification is correct, both independently and in comparison with the importer's alternative.'" Shamrock Bldg. Materials Inc., 47 CIT at __, 619 F. Supp. at 1342 (quoting Jarvis Clark Co., 733 F.2d at 878). Before the Court are three different tariff provisions.

As an initial matter, Plaintiff argues that Defendant is precluded from advancing a new classification of Axion CA 1330, separate from the prior classification by U.S. Customs and Border Protection ("Customs"). Pl.'s Resp. Def.'s Cross-Mot. Summ. J. & Mem. Law Supp. & Opp'n Pl.'s Mot. Summ. J. ("Pl.'s Resp. Br.") at 19–20, ECF No. 50. Plaintiff contends that pursuant to USCIT Rule 13, Defendant must amend its answer to assert a counterclaim or defense. Id. at 19; see USCIT R. 13 (requiring that a counterclaim be in the pleading). Plaintiff argues further that Defendant cannot argue for an alternative classification because the subject merchandise are subject to a binding Customs ruling. Id. at 21–23. Defendant avers that asserting a counterclaim is not necessary to advance a different classification and that Defendant may raise the different classification as a defense. Def.'s Reply Mem. Supp. Cross-Mot. Summ. J. ("Def.'s Reply Br.") at 13–14, ECF No. 59 (citing Second Nature Designs, Ltd. v. United States, 47 CIT __, __, 654 F. Supp. 3d 1301, 1306–07 (2023); Maple Leaf Mktg., Inc. v. United States, 47 CIT __, __, 639 F. Supp. 3d 1363, 1366–67 (2023); Second Nature Designs, Ltd. v. United States, 46 CIT __, 586 F. Supp. 3d 1334 (2022); Cyber Power Sys. (USA) Inc. v. United States, 46 CIT __, __, 586 F. Supp. 3d 1325, 1333–34 (2022)).

The Court has exclusive jurisdiction to render judgment upon "any counterclaim, cross-claim, or third-party action of any party, if (1) such claim or

action involves the imported merchandise that is the subject matter of such civil action, or (2) such claim or action is to recover upon a bond or customs duties relating to such merchandise." 28 U.S.C. § 1583. The legislative history of 28 U.S.C. § 1583 confirms that "the Government should not be precluded from asserting a claim that would allow the court to make the proper determination and accordingly would enable the Government to collect the full amount of duties." H.R. Rep. No. 96–1235, at 36–38 (1980), as reprinted in 1980 U.S.C.C.A.N. 3729, 3748–49.

The Court has a statutory mandate to "reach a correct result." Jarvis Clark Co., 733 F.2d at 878; see 28 U.S.C. § 2643(b) ("[T]he court may order . . . adjudicative procedures as the court considers necessary to enable it to reach the correct decision."). See also 28 U.S.C. § 2643(c)(1) ("[T]he Court of International Trade may . . . order any other form of relief that is appropriate in a civil action[.]"). Under its authority to reach the correct result, the Court will consider Defendant's alternative classification of Axion CA 1330 under HTSUS subheading 3824.99.28.

III. Analysis of the Tariff Terms

The Court must assess initially whether HTSUS subheadings 3208.90.00, 3824.99.28, and 3815.19.00 are use provisions or *eo nomine* provisions.

An *eo nomine* provision describes articles by specific names and includes all forms of the named article, even the article's improved forms. S.C. Johnson & Son Inc. v. United States, 999 F.3d 1382, 1388 (Fed. Cir. 2021) (citing Schlumberger Tech. Corp., 845 F.3d at 1164); see Ford Motor Co., 926 F.3d at 750; see, e.g., Otter Prods., LLC v. United States, 834 F.3d 1369, 1375–76 (Fed. Cir. 2016).

A use provision classifies articles based on their principal or actual use. Schlumberger Tech. Corp., 845 F.3d at 1164. See also R.T. Foods, Inc. v. United States, 757 F.3d 1349, 1355 (Fed. Cir. 2014). A use provision does not need to expressly use the words "used for." S.C. Johnson & Son Inc., 999 F.3d at 1389 (citation omitted). Generic terms that are preceded by an adjective that suggests a manner of use can constitute a principal use provision. Id. (citing Stewart-Warner Corp. v. United States, 748 F.2d 663, 667 (Fed. Cir. 1984)).

ARI 1(a), which governs use provisions, provides that:

> 1. In the absence of special language or context which otherwise requires—
>
> > (a) a tariff classification controlled by use (other than actual use) is to be determined in accordance with the use in the United States at, or immediately prior to, the date of importation, of goods of that class or kind to which the imported goods belong, and the controlling use is the principal use[.]

ARI 1(a), HTSUS. Principal use "has been defined as the use 'which exceeds any other single use.'" Aromont USA, Inc. v. United States, 671 F.3d 1310, 1312

(Fed. Cir. 2012) (emphasis omitted) (quoting Lenox Collections v. United States, 20 CIT 194, 196, 1996 WL 47155, at *1 (1996)).

A. HTSUS Subheading 3208.90.00

As noted previously, the Court first considers whether the Government's classification of the subject merchandise is correct, both independently and compared to the importer's alternative. See Shamrock Bldg. Materials Inc., 47 CIT at __, 619 F. Supp. 3d at 1342; Jarvis Clark Co., 733 F.2d at 878.

HTSUS subheading 3208.90.00 covers:

3208 Paints and varnishes (including enamels and lacquers) based on synthetic polymers or chemically modified natural polymers, dispersed or dissolved in a nonaqueous medium; solutions as defined in note 4 of this chapter:

3208.90.00 Other:

HTSUS Subheading 3208.90.00.

Note 4 to HTSUS Chapter 32 reads "solutions (other than collodions) consisting of any of the products specified in heading 3901 to 3913 in volatile organic solvents when the weight of the solvent exceeds 50 percent of the weight of the solution." Note 4 to HTSUS Chapter 32. The products in HTSUS headings 3901 to 3913 are as follows:

3901: Polymers of ethylene, in primary forms
3902: Polymers of propylene or of other olefins, in primary forms
3903: Polymers of styrene, in primary forms
3904: Polymers of vinyl chloride or of other halogenated olefins, in primary forms

> 3905: Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms
> 3906: Acrylic polymers in primary forms
> 3907: Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins; polyallyl esters and other polyesters, in primary forms
> 3908: Polyamides in primary forms
> 3909: Amino-resins, phenolic resins and polyurethanes, in primary forms
> 3910: Silicones in primary forms
> 3911: Petroleum resins, coumarone-indene resins, polyterpenes, polysulfides, polysulfones and other products specified in note 3 to this chapter, not elsewhere specified or included, in primary forms
> 3912: Cellulose and its chemical derivatives, not elsewhere specified or included, in primary forms
> 3913: Natural polymers (for example, alginic acid) and modified natural polymers (for example, hardened proteins, chemical derivatives of natural rubber), not elsewhere specified or included, in primary forms.

HTSUS Headings 3901–3913. Because the tariff terms identify subject merchandise by name, the Court concludes that HTSUS subheading 3208.90.00 is an *eo nomine* provision.

The Court may "under certain circumstances" consider whether use is implicated by the tariff terms at issue, even when the term under consideration appears to be an *eo nomine* tariff term. GRK Canada, Ltd. v. United States, 761 F.3d 1354, 1358–59 (Fed. Cir. 2014). Neither the terms of HTSUS subheading 3208.90.00 nor the Explanatory Notes indicate that the tariff terms are controlled by use. Therefore, the Court concludes that HTSUS subheading 3208.90.00 is an *eo nomine* provision.

A "paint" is defined as "a mixture of a pigment and a suitable liquid to form a closely adherent coating when spread on a surface in a thin coat." See Paint, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/paint (last visited June 9, 2026). The Explanatory Notes to HTSUS subheading 3208.90.00 state in relevant part: "[p]aints of this heading are dispersions of insoluble [coloring] matter . . . or metallic flakes or powders, in a vehicle consisting of a binder dispersed or dissolved in a non-aqueous medium. The binder, which is the film-producing agent, consists of synthetic polymers . . . or of chemically modified natural polymers[.]" Explanatory Notes to HTSUS Heading 3208. Based on the dictionary definition and the Explanatory Notes, the Court construes the meaning of the tariff term "paint" in HTSUS subheading 3208.90.00 to mean a mixture of a pigment and a suitable liquid that coats a surface.

A "varnish" is defined as "a liquid preparation that when applied to a surface dries to form a hard lustrous typically transparent coating." See Varnish, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/varnish (last visited June 9, 2026). The Explanatory Notes state that varnishes and lacquers "are liquid preparations for protecting or decorating surfaces . . . based on synthetic polymers . . . or chemically modified natural polymers . . . [that] form a dry, water-insoluble, relatively hard, more or less transparent or translucent, smooth, continuous film which may be glossy, matt or satiny." Explanatory Notes to

HTSUS Heading 3208. The Court construes the meaning of the tariff term "varnishes" in HTSUS subheading 3208.90.00 to mean goods in liquid form that, when applied, protect or decorate surfaces.

Customs classified Axion CA 1330 as a paint or varnish under HTSUS subheading 3208.90.00. NY Ruling Letter N128896 (Nov. 10, 2010). It is an undisputed fact that Axion CA 1330 is neither a paint nor a varnish. Joint Statement Facts at ¶ 48. The Court concludes that Axion CA 1330 is not a "paint" classifiable under HTSUS subheading 3208.90.00 because Axion CA 1330 is undisputably not a mixture of a pigment and a suitable liquid that coats a surface. Further, the Court concludes that Axion CA 1330 is not a "varnish" classifiable under HTSUS subheading 3208.90.00 because Axion CA 1330 is not a product in liquid form that, when applied, protects or decorates surfaces.

HTSUS subheading 3208.90.00 also covers "solutions as defined in note 4 to Chapter 32." HTSUS Heading 3208. Note 4 to HTSUS Chapter 32 states that "Heading 3208 includes solutions (other than collodions) consisting of any of the products specified in headings 3901 to 3913 in volatile organic solvents when the weight of the solvent exceeds 50 percent of the weight of the solution." Note 4 to HTSUS Chapter 32. HTSUS headings 3901–3913 are contained in HTSUS Chapter 39, which covers "Plastics and articles thereof." See HTSUS Chapter 39. The Explanatory Notes to HTSUS Chapter 39 state:

> In general, this Chapter covers substances called polymers and semi-manufactures and articles thereof, provided they are not excluded by Note 2 to the Chapter.
>
> Polymers
> Polymers consist of molecules which are characterized by the repetition of one or more types of monomer units.

Explanatory Notes to HTSUS Chapter 39. The Explanatory Notes to HTSUS Chapter 39 further state that "polymers" are formed by "addition polymerization," "rearrangement polymerization," and "condensation polymerization." Id. Axion CA 1330 does not satisfy the criterion set out in Note 4 to HTSUS Chapter 32 because it is undisputed that Axion CA 1330 is not a polymer within the meaning of HTSUS Chapter 39 and does not contain any of the products specified in HTSUS headings 3901–3913. See Joint Statement Facts at ¶ 6 (stating that Axion CA 1330 is a mixture in liquid form consisting of between 50–70% toluene, between 30–50% MAO, and between 1–5% TMA); HTSUS Headings 3901–3913. Because Axion CA 1330 is not a "paint" or "varnish," is not a polymer within the meaning of Chapter 39, and does not consist of any of the products specified in headings 3901 to 3913, the Court concludes that Axion CA 1330 is not classifiable under HTSUS subheading 3208.90.00 as determined by Customs.

B. HTSUS Subheading 3815.19.00

The Court next considers Plaintiff's argument that Axion CA 1330 is classifiable under HTSUS subheading 3815.19.00. HTSUS subheading 3815.19.00 covers:

3815 Reaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included:

Supported Catalysts:

3815.19.00 Other:

HTSUS Subheading 3815.19.00. The terms contained in HTSUS subheading 3815.19.00 are not defined in the HTSUS or any section or chapter notes. Accordingly, the terms are to be defined according to their common and popular meaning. See Baxter Healthcare Corp. of P.R., 182 F.3d at 1337. Because the tariff terms identify subject merchandise by name, the Court concludes that HTSUS subheading 3815.19.00 is an *eo nomine* provision. Nothing in HTSUS subheading 3815.19.00 indicates that the tariff terms are controlled by use. See HTSUS Subheading 3815.19.00. The word "use" or similar words do not appear, see GRK Canada, Ltd., 761 F.3d at 1359, and there is no implication that the use of the terms is of "paramount importance" to its identity. See id. at 1358.

The Explanatory Notes to HTSUS heading 3815 provide that:

> This heading covers preparations which initiate or accelerate certain chemical processes. Products which retard these processes are not included.

> These preparations fall broadly into two groups.
>
> (a) Those of the first group are, in general, composed either of one or more active substances deposited on a support (known as "supported catalysts") or of mixtures with a basis of active substances. In the majority of cases, these active substances are certain metals, metallic oxides, other metallic compounds or mixtures thereof. The metals most frequently used as such or as compounds are cobalt, nickel, palladium, platinum, molybdenum, chromium, copper or zinc. The support, sometimes activated, generally consists of alumina, carbon, silica gel, siliceous fossil meal or ceramic materials. Examples of "supported catalysts" are supported Ziegler or Ziegler-Natta types.

Explanatory Notes to HTSUS Heading 3815. Although the Explanatory Notes suggest that the preparations may initiate or accelerate certain chemical processes, the Court concludes that this does not convert HTSUS subheading 3815.19.00 into a use provision, because the tariff subheading describes goods that are "[r]eaction initiators, reaction accelerators and catalytic preparations . . . [s]upported catalysts . . . [o]ther." HTSUS Subheading 3815.19.00. The Court concludes that HTSUS subheading 3815.19.00 is an *eo nomine* provision.

"Reaction" is defined as "a chemical transformation or change; the interaction of chemical entities." See Reaction, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/reaction (last visited June 9, 2026). "Chemical reaction" is defined as "[a] change in which one or more [chemical elements] or compounds (the reactants) form new compounds (the products)." See Chemical Reaction, OXFORD DICTIONARY OF CHEMISTRY (8th ed. 2020).

"Initiators" are defined as "a source of any chemical species that reacts with a monomer (single molecule that can form chemical bonds) to form an intermediate compound capable of linking successively with a large number of other monomers into a polymeric compound." See Initiator, Encyclopedia Britannica, https://www.britannica.com/science/initiator-polymerization (last visited June 9, 2026). The Court construes the meaning of the tariff term "reaction initiator" in HTSUS subheading 3815.19.00 to mean preparations that transform or change a chemical reaction.

"Accelerator" is defined as "[a] substance that increases the rate of a chemical reaction, i.e. a catalyst." See Accelerator, OXFORD DICTIONARY OF CHEMISTRY (8th ed. 2020). The Court construes the tariff term "reaction accelerator" in HTSUS subheading 3815.19.00 to mean a substance that increases the rate of a chemical reaction or process.

"Catalytic" is defined as "causing, involving, or relating to catalysis." See Catalytic, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/catalytic (last visited June 9, 2026). "Catalysis" is defined as "[t]he process of changing the rate of a chemical reaction by use of a catalyst." See Catalysis, OXFORD DICTIONARY OF CHEMISTRY (8th ed. 2020). "Catalyst" is defined as "[a] substance that increases the rate of a chemical reaction without undergoing any permanent chemical change." See Catalyst, OXFORD DICTIONARY

OF CHEMISTRY (8th ed. 2020). "Preparations" is defined as "something that is prepared," and "prepared" is defined as something "subjected to a special process or treatment." See Preparation, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/preparation (last visited June 9, 2026); Prepared, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/prepared (last visited June 9, 2026). Accordingly, the Court construes the tariff term "catalytic preparation" in HTSUS subheading 3815.19.00 to mean a substance that is prepared through a special process or treatment that increases the rate of a chemical reaction without undergoing any permanent chemical change.

Plaintiff argues that Axion CA 1330 is classifiable under HTSUS subheading 3815.19.00. Pl.'s Br. at 9. Plaintiff contends that Lanxess' customers exclusively use Axion CA 1330 as a component of a supported catalyst, and although Axion CA 1330 cannot fulfill the alleged purpose of accelerating reactions in its imported state, it is used as an essential component of supported catalysts to accelerate reactions, and the relevant industries refer to Axion CA 1330 as a component of a supported catalyst. Id. at 9, 11 n.8. Plaintiff avers that Axion CA 1330 is classifiable under HTSUS subheading 3815.19.00 because it is a "reaction accelerator" and would "appear to meet the definition of a 'catalytic preparation' in [HTSUS] heading 3815[.]" Pl.'s Resp. Br. at 10. Defendant

contends that in its condition as imported, Axion CA 1330 is not a reaction accelerator "as it cannot increase the speed or rate of olefin polymerization[,]" and is not a "catalytic preparation" because Axion CA 1330 "cannot accelerate a chemical reaction, is not deposited on a support, and lacks the metallocene component necessary to create the catalytic center." Def.'s Br. at 14, 19.

The undisputed facts establish that the subject merchandise "cannot accelerate the rate of a chemical reaction" and are "not a reaction initiator." Joint Statement Facts at ¶¶ 38, 46. The undisputed facts demonstrate that in its condition as imported, Axion CA 1330 is intended to be a component of a supported catalyst system, is not catalytically active, and is not deposited on a support. Id. at ¶¶ 30, 37, 39. To make this supported catalyst system, "Axion CA 1330, a metallocene proprietary to the polyolefin producer, and a silica gel are mixed together in a slurry and toluene is removed by evaporation . . . [and] [t]his mixture is then introduced into the reactor with the olefin." Id. at ¶ 31. The undisputed facts describe the specific role of Axion CA 1330 in the catalyst system in four steps, in which Axion CA 1330: (1) alkylates the metallocene compound, meaning that typically two chloride atoms on the metallocene are exchanged with a methyl group from Axion CA 1330; (2) extracts an alkyl group from the metallocene compound to generate an active cation; (3) acts as a bulky, inert anion

to the highly reactive transition metal cation; and (4) scavenges impurities from the polymerization reactor. Id. at ¶ 36.

Plaintiff's arguments in favor of classification under HTSUS subheading 3815.19.00 are unpersuasive. For tariff classifications, an article is to be classified by "the condition in which it is imported." Rico Import Co. v. United States, 12 F.3d 1088, 1090 (Fed. Cir. 1993) (quoting Worthington v. Robbins, 139 U.S. 337, 341 (1891). Because HTSUS subheading 3815.19.00 pertains only to "reaction initiators," "reaction accelerators," and "catalytic preparations," and the undisputed facts established that in its condition as imported, Axion CA 1330 is not a reaction initiator, cannot accelerate the rate of a chemical reaction, and is not catalytically active, the subject merchandise do not meet the terms of the heading and are not classifiable under HTSUS subheading 3815.19.00. Furthermore, the Explanatory Notes clarify that HTSUS heading 3815 covers preparations that are composed of either one or more active substances deposited on a support or of mixtures with a basis of active substances. See Explanatory Notes to HTSUS Heading 3815. As discussed above, the undisputed facts establish that Axion CA 1330, in its condition as imported, is not deposited on a support and is not catalytically active. Joint Statement Facts at ¶¶ 37, 39. Accordingly, Axion CA 1330 is not classifiable under HTSUS subheading 3815.19.00.

C. HTSUS Subheading 3824.99.28

The Court next considers Defendant's argument that Axion CA 1330 is properly classifiable under HTSUS subheading 3824.99.28, which reads:

> 3824 Prepared binders for foundry molds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural product), not elsewhere specified or included:
>
> 3824.99. Other:
>
> 3824.99.28 Other: Mixtures containing 5 percent or more by weight in one or more aromatic or modified aromatic substances: Other

HTSUS Subheading 3824.99.28. The terms contained in HTSUS subheading 3824.99.28 are not defined in the HTSUS or any section or chapter notes. Accordingly, the terms are to be defined according to their common and popular meaning. See Baxter Healthcare Corp. of P.R., 182 F.3d at 1337. Because the tariff terms identify subject merchandise by name, the Court concludes that HTSUS subheading 3824.99.28 is an *eo nomine* provision.

Nothing in HTSUS subheading 3824.99.28 indicates that the tariff terms are controlled by use. The word "use" or similar words do not appear, see GRK Canada, Ltd., 761 F.3d at 1359, and there is no implication that the use of the terms is of "paramount importance" to its identity. See id. at 1358. The Explanatory Notes do not provide any indication that HTSUS subheading 3824.99.28 is a use

provision. See Explanatory Notes to HTSUS Heading 3824. Therefore, HTSUS subheading 3824.99.28 is an *eo nomine* provision.

"Chemical," when used as an adjective, is defined as "of, relating to, used in, or produced by chemistry or the phenomena of chemistry." See Chemical, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/chemical (last visited June 9, 2026). "Preparations" is defined as "something that is prepared," and "prepared" is defined as something "subjected to a special process or treatment." See Preparation, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/preparation (last visited June 9, 2026); Prepared, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/prepared (last visited June 9, 2026). "Allied," when used as an adjective, is defined as "related especially by common properties or qualities." See Allied, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/allied (last visited June 9, 2026). "Industry" is defined as "a distinct group of businesses that provide a particular product or service." See Industry, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/industry (last visited June 9, 2026). The Court construes the tariff provision "chemical products and preparations of the chemical or allied industries" in HTSUS subheading 3824.99.28 to mean chemical products that are subjected to a special process or treatment of the chemical or related industries.

Defendant contends that Axion CA 1330 is classifiable under HTSUS subheading 3824.99.28 because Axion CA 1330 is a chemical preparation of the chemical or allied industries that Lanxess, as a specialty chemical company, sells to companies that manufacture polypropylene and polyethylene. Def.'s Br. at 22–23. Defendant avers that Axion CA 1330 is a chemical "prepared or made up for use or application in a chemical reaction[,] specifically, to activate the metallocene in a supported catalyst system, that then acts as the catalyst in the olefin polymerization process." Id. at 23. It is an undisputed fact that Lanxess is a specialty chemical company that is part of the chemical industry, and its customers are also part of that industry. Joint Statement Facts at ¶ 49.

The undisputed facts establish that Axion CA 1330 is used in a supported catalyst system for the polymerization of polyolefins, and Lanxess knows of no other commercial use of Axion CA 1330. Id. at ¶¶ 16, 17. In its condition as imported, Axion CA 1330 is intended to be a component of a supported catalyst system, is not catalytically active, cannot accelerate the rate of a chemical reaction, and is not deposited on a support. Id. at ¶¶ 30, 37–39. The undisputed facts demonstrate that Lanxess' U.S. customers combine Axion CA 1330 with an amount of metallocene of their choice and this mixture must be supported to be used in a commercially viable polymerization gas phase process. Id. at ¶¶ 32–33. When Axion CA 1330 and the metallocene are combined, Axion CA 1330

activates the metallocene. Id. at 42. The Parties stipulated that silica gel is used as the support with "the typical catalyst system being about 70–90% silica gel, less than 30% Axion CA 1330, and less than 1% metallocene by weight." Id. at ¶ 34. This supported catalyst system is made by mixing into a slurry "Axion CA 1330, a metallocene proprietary to the polyolefin producer, and a silica gel," and then toluene is removed by evaporation. Id. at ¶ 31. This mixture is then introduced into the reactor with the olefin. Id. The metallocene is activated by Axion CA 1330, and functions as the catalytic center in the polymerization of olefins in the supported catalyst system. Id. at 43.

For tariff classifications, an article is to be classified by "the condition in which it is imported." Rico Import Co., 12 F.3d at 1090 (quoting Worthington, 139 U.S. at 341). The undisputed facts establish that, in its condition as imported, Axion CA 1330 is a chemical preparation of the chemical or allied industries because Axion CA 1330 is a chemical prepared or made for use or application in a chemical reaction. The chemical reaction is the activation of the metallocene in a supported catalyst system in which the metallocene acts as the catalyst in the olefin polymerization. After importation, Lanxess' customers combine Axion CA 1330 with an amount of metallocene of their choice and this mixture must be supported to be used in a commercially viable polymerization gas phase process. Joint Statement Facts at ¶¶ 32–33. Because Axion CA 1330, in its condition as

imported, is a component of a supported catalyst system that is made up of Axion CA 1330, silica gel, and a metallocene chosen by the polyolefin producer, which satisfies the definition of a chemical product that is subjected to a special process or treatment of the chemical or related industries, the Court concludes that the subject merchandise are classifiable under HTSUS subheading 3824.99.28.

IV. Higher Duties

The Court's conclusion that the subject merchandise are properly classifiable under HTSUS subheading 3824.99.28 results in a higher duty rate of 6.5% *ad valorem*. HTSUS Subheading 3824.99.28. Plaintiff argues that if the Court classifies Axion CA 1330 under HTSUS subheading 3824.99.28, the Court may not order reliquidation at the higher duty rate for entries that have already been liquidated, including those subject to pending protests, and that Defendant's requested remedy violates Customs' own rules "because the remedy seeks reliquidation at a higher duty rate and payment of outstanding fees." Pl.'s Resp. Br. at 23. Defendant contends that the Court has the power to determine the proper classification of the merchandise and order any form of relief related to the proper classification under 28 U.S.C. § 2643. See Def.'s Br. at 10; Def.'s Reply Br. at 15.

"Congress has carefully crafted a statutory scheme that specifically articulates grounds for finality and certain exceptions to finality[.]" Target Corp. v. United States, 134 F.4th 1307, 1314–15 (Fed. Cir. 2025); see 19 U.S.C. §§ 1504,

1514, 1515; 28 U.S.C. § 1581. "[A]n entry of merchandise . . . not liquidated within 1 year . . . shall be deemed liquidated at the rate of duty, value, quantity, and amount of duties asserted by the importer of record." 19 U.S.C. § 1504(a). Customs may reliquidate an entry, "notwithstanding the filing of a protest, within [90] days from the date of the original liquidation." 19 U.S.C. § 1501. Sections 1514(a) and (c) provide an importer the right to protest Customs' classification determinations within 180 days of liquidation of the entry. 19 U.S.C. §§ 1514(a), (c)(3). When Customs denies a timely protest, the importer may challenge the denial by filing a claim at the United States Court of International Trade. 28 U.S.C. § 1581.

In fulfilling its duty to find the correct result under Jarvis Clark Co., the Court concludes that the subject merchandise should have been classified under HTSUS subheading 3824.99.28, which would have subjected the subject merchandise to a 6.5% *ad valorem* duty. See 733 F.2d at 878; HTSUS Subheading 3824.99.28. At liquidation, Customs classified Axion CA 1330 under HTSUS subheading 3208.90.00 with a duty rate of 3.2% *ad valorem*. See Summons Against Denial of Protests 1303-21-103455 and 1401-21-106422, ECF No. 1. Once the voluntary reliquidation period had passed, Customs no longer had a statutory mechanism to correct the classification and impose the 6.5% *ad valorem* duty imposed by HTSUS subheading 3824.99.28. See generally, 19

U.S.C §§ 1504, 1514, 1515; 28 U.S.C § 1581. Although the Court must determine the correct classification for merchandise, its authority to impose duties or order reliquidation of entries can "be limited by statute and rule[.]" Target Corp., 134 F.4th at 1314 (citing Chambers v. NASCO, Inc., 501 U.S. 32, 47 (1991)). Once liquidation is final for Customs, the Court's classification conclusion will not result in reliquidation and the Court cannot circumvent the finality principles outlined by Congress's statutory scheme. See id. at 1314–15.

CONCLUSION

For the foregoing reasons, the Court concludes that the subject merchandise Axion CA 1330 are properly classifiable under HTSUS subheading 3824.99.28, and Customs may not reliquidate the entries and collect any additional duties.

Accordingly, it is hereby

ORDERED that Plaintiff's Motion for Summary Judgment, ECF No. 39, is denied; and it is further

ORDERED that Defendant's Cross-Motion for Summary Judgment, ECF No. 42, is granted in part and denied in part.

Judgment will be issued accordingly.

/s/ Jennifer Choe-Groves
Jennifer Choe-Groves, Judge

Dated: June 9, 2026
New York, New York