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International Trade Administration
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A-570-882
Scope Inquiry
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SUBJECT: Final Scope Ruling: Antidumping Duty Order on Brown
Aluminum from the People's Republic of China (A-570-882):
3M Company

Summary

On September 19, 2006, the Department of Commerce (the Department) received a request from 3M Company (3M), for a scope ruling concerning whether semi-friable aluminum oxide and heat-treated aluminum oxide are covered by the antidumping duty order on refined brown aluminum oxide (RBAO) from the People's Republic of China (PRC). See Antidumping Duty Order: Brown Aluminum Oxide From the People's Republic of China, 68 FR 65249 (November 19, 2003) (Order). In accordance with 19 CFR § 351.225(k)(2) we recommend that the Department determine that semi-friable aluminum oxide and heat-treated aluminum oxide are included within the scope of the Order.

Background

On September 19, 2006, the Department received a scope ruling inquiry from 3M requesting that the Department determine that imports of certain semi-friable aluminum oxide and heat-treated aluminum oxide are outside the scope of the Order. On November 3, 2006, the domestic interested parties, Washington Mills Company Inc., Treibacher Schleifmittel Corporation, and C-



E Minerals (collectively, Washington Mills) filed a response opposing 3M's request, to which 3M subsequently responded on November 29, 2006. On January 17, 2007, the Department concluded that further examination under 19 CFR § 351.225(k)(2) was warranted and initiated a formal scope inquiry. Interested parties were given until February 7, 2007, to address the criteria outlined in 19 CFR § 351.225(k)(2), and until February 19, 2007, to submit written rebuttals. On February 7, 2007, 3M and Washington Mills filed comments addressing the factors outlined in 19 CFR § 351.225(k)(2). The Department accepted late rebuttals from each party regarding previous comments on February 20, 2007. No other party has submitted comments on 3M's scope request.

Scope of the Order

The scope of the Order, as provided below, was established on November 19, 2003.

The merchandise covered by this investigation is ground, pulverized, or refined brown artificial corundum, also known as refined brown aluminum oxide or brown fused alumina, in grit size of 3/8 inch or less. Excluded from the scope of the investigation is crude artificial corundum in which particles with a diameter greater than 3/8 inch constitute at least 50 percent of the total weight of the entire batch. The scope includes brown artificial corundum in which particles with a diameter greater than 3/8 inch constitute less than 50 percent of the total weight of the batch. The merchandise under investigation is currently classifiable under subheading 2818.10.20.00 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

The Department subsequently clarified the scope of the Order in the *Cometals*¹ determination. Specifically, the Department determined that "ground, pulverized or Refined Black Aluminum Oxide, also known as black fused alumina or black emery, with an aluminum oxide content of 55-80 percent" is excluded from the scope of the Order.²

3M's Scope Request and Comments

3M contends that semi-friable aluminum oxide and heat-treated aluminum oxide are not covered by the scope of the Order. Specifically, 3M contends that semi-friable aluminum oxide and heat-treated aluminum oxide are "specialty" abrasives whose physical characteristics, end-uses,

¹See Final Scope Ruling on Whether Black Aluminum Oxide is Excluded from the Scope of the Antidumping Order on Brown Aluminum Oxide from the People's Republic of China, Memorandum from Laurie Parkhill to Barbara E. Tillman (February 7, 2005) ("*Cometals*").

² *Id.* at 6. The Department made its determination after reviewing the petition and record of the investigation and found that a full scope inquiry pursuant to 351.225(j) or 351.225(k)(2) was unnecessary.

advertisement and display, and ultimate purchaser expectations distinguish it from the brown aluminum oxide covered by the Order.

1. Semi-Friable Aluminum Oxide

3M contends that, in contrast to the RBAO covered by the Order, semi-friable aluminum oxide comes in a variety of colors. In its September 19, 2006, request, 3M states that semi-friable aluminum oxide comes in colors ranging from light pink to light brown. See Scope Ruling Request for 3M (September 19, 2006) (3M Scope Request), at 4-5. In its February 7, 2007, submission, 3M again states that semi-friable aluminum oxide comes in a variety of colors, which distinguish it from the RBAO covered by the Order, including pink, blue, gray, red, and tan. See Scope Inquiry Comments Regarding Semi-Friable and Heat-Treated Specialty Aluminum Oxides Imported by 3M (February 7, 2007) (3M Scope Inquiry Comments), at 10. Citing the Department's *Cometals* determination, which 3M states confirmed that all colors of aluminum oxide that are not "brown" are outside the scope of the Order, 3M contends that because semi-friable aluminum oxide comes in a variety of colors that are lighter than brown aluminum oxide, it is not covered by the Order.

3M also asserts that semi-friable aluminum oxide has a higher percentage of Al_2O_3 (alumina) and a lower percentage of TiO_2 (titanium dioxide) content than that found in the RBAO covered by the Order. See 3M Scope Inquiry Comments at 9. In its the 3M scope request, 3M states that semi-friable aluminum oxide generally has an Al_2O_3 content greater than 97 percent. See 3M Scope Request at 13. However, in its February 7, 2007, submission, 3M states that pink, blue, gray, red, and tan semi-friable aluminum oxide all have an Al_2O_3 content greater than 97 percent. See 3M Scope Inquiry Comments at 10.³ 3M states that semi-friable aluminum oxide has a TiO_2 content of 1-2 percent, whereas the RBAO covered by the Order has a TiO_2 content of 2-4 percent. See Id. 3M contends that these distinguishing chemical characteristics make semi-friable aluminum oxide more friable (i.e., it fractures more easily) than the RBAO covered by the Order. See Id. at 9. As a result, semi-friable aluminum oxide cuts faster with less heat and has a lower tendency to "rub" on the surface being ground as the abrasive product wears. See Id. Thus, 3M asserts, semi-friable aluminum oxide has different end-uses from the RBAO covered by the Order. See Id. at 5. For example, semi-friable aluminum oxide is used in operations, such as sensitive metals, wood, and paint that require a higher rate of material removal without the need to apply high pressure or generate high temperatures, applications for which, 3M contends, the RBAO covered by the Order is not a viable substitute. See 3M Scope Request at 5. Further, 3M contends that the different Al_2O_3 and TiO_2 compositions found in semi-friable aluminum oxide make it 10-50 percent more expensive than the RBAO covered by the Order. See Id. at 5.

3M states that while all types of aluminum oxide grains travel in the same channels of trade, the different types of brown aluminum oxide always are distinguished in the industry. See 3M Scope Inquiry Comments at 21. Further, 3M contends that the advertising for semi-friable aluminum oxide is also significantly different from that used for the RBAO covered by the Order. See Id. at 22. For example, 3M states that when semi-friable aluminum oxide is used in a product, rather than the brown aluminum oxide covered by the Order, this fact is generally

³ 3M does not put any information on record as to why there is this difference in the alumina content being reported.

clearly stated in the product description. See Id. In addition, 3M states that product catalogs generally identify the difference between the RBAO covered by the Order and semi-friable aluminum oxide so that the customer understands that the higher price of semi-friable aluminum oxide is due to its enhanced performance. See 3M Scope Inquiry Comments at 22-23.

2. Heat-Treated Aluminum Oxide

3M contends that heat-treating aluminum oxide at between 1100° and 1300° Celsius alters the atomic organization and creates different crystalline structures from that found in brown aluminum oxide covered by the Order. See 3M Scope Inquiry Comments at 11. 3M further contends that although heat-treated aluminum oxide may have a chemical composition that is similar to the RBAO covered by the Order, heat-treated aluminum oxide is distinguishable based on the fact that it contains an extra oxygen atom by virtue of the heat-treatment process. See Id. at 12. Specifically, 3M states that the titanium atom is in the 3+ oxidization state before the heat-treatment and after, it oxidizes to the 4+ state. See Id. at 11. This, 3M argues, creates the change in color (ranging from light grey to blue), as well as increases its hardness and toughness. See Id. at 12. 3M contends that although heat-treated aluminum oxide has an Al₂O₃ content that is within the range of the brown aluminum oxide covered by the Order (i.e., 93-97 percent), its distinguishing crystalline structure and resulting color change place heat-treated aluminum oxide outside of the scope of the Order. See Id. at 11. 3M further contends that other processes for treating the RBAO covered by the Order (i.e. densifying and magnetic separation) are merely surface treatments to the brown aluminum oxide, which 3M argues, do not generally change its color. See 3M Rebuttal to Petitioner Comments (November 29, 2006) (3M Rebuttal). Thus, 3M contends the brown aluminum oxide is still brown in chemistry, phase, and color, whereas the heat-treating process changes the aluminum oxide completely. See Id. at 4.

3M also contends that like semi-friable aluminum oxide, heat-treated aluminum oxide is a specialty abrasive which, as a result of its distinguishing crystalline structure, sells for a premium of 25-75 percent over the RBAO covered by the Order. See 3M Scope Inquiry Comments at 17. 3M states that heat-treated aluminum oxide generally provides a higher cut rate and because it is tougher, performs better in high pressure applications than the RBAO covered by the Order. See Id. at 17. 3M also states that like semi-friable aluminum oxide, heat-treated aluminum oxide travels in the same channels of trade as the RBAO covered by the Order; however, the different types of aluminum oxides are always distinguished. See Id. at 21. 3M also states that when heat-treated aluminum oxide is used in a product it is generally clearly displayed to explain the price premium over other similar products. See Id. at 22.

Washington Mills Comments

Washington Mills contends that both semi-friable aluminum oxide and heat-treated aluminum oxide are simply products within a variety of brown aluminum oxide products and should be found to be unambiguously covered by the scope of the Order under a 351.225(k)(1) analysis. Washington Mills further contends that an analysis of 351.225(k)(2) criteria likewise indicates that the merchandise covered by the 3M scope request is subject to the Order.

1. Semi-Friable Aluminum Oxide

Washington Mills contends that, based on chemical composition and physical properties the semi-friable aluminum oxide described by 3M is largely indistinguishable from the RBAO covered by the Order. For example, Washington Mills contends that semi-friable aluminum oxide falls within the chemical composition range covered by the scope of the Order. See Petitioner Rebuttal Comments to 3M Comments (February 20, 2007) (Washington Mills Rebuttal), at 2. Specifically, they contend that at least some, if not most, of the semi-friable aluminum oxide has the same Al_2O_3 content as the RBAO covered by the Order (i.e., 93-97 percent). Further, Washington Mills contends that all semi-friable aluminum oxide is brown in color. See Id. at 3.

Washington Mills contends that 3M's reliance on the *Cometals* determination to support its position that semi-friable aluminum oxide is outside the scope of the Order is misplaced. For example, in the *Cometals* determination the merchandise at issue (i.e., black aluminum oxide) generally has an Al_2O_3 content ranging from 55-80 percent, well outside the established range of 93-97 percent for the RBAO. See Washington Mills' Response to Department's Request for Information Regarding Scope Proceeding (Washington Mills Response) (February 7, 2007), at 4. Semi-friable aluminum oxide, in contrast, has an Al_2O_3 content within the middle of the illustrative range of Al_2O_3 set out in the petition. See Id. at 4. Washington Mills also distinguishes semi-friable aluminum oxide from white or pink aluminum oxide, both of which are excluded from the Order. See Id. at 5. Specifically, Washington Mills contends that the raw material for production of all refined brown aluminum oxide, including semi-friable aluminum oxide is calcined bauxite, as opposed to calcined alumina which is used in white and pink aluminum oxide. See Id.

Washington Mills contends that the TiO_2 content for semi-friable aluminum oxide ranges from 1.5 to 3.9 percent, putting it well within the established 2-4 percent range found in the RBAO covered by the Order. See Id. at 7. Washington Mills further contends that while some semi-friable aluminum oxide may be more friable than the RBAO covered by the Order, the reverse can also be true (i.e., RBAO with a "chemical composition of 94 percent Al_2O_3 and 3.0 percent TiO_2 could be significantly more friable than semi-friable aluminum oxide with a chemical composition of 98 percent Al_2O_3 and 1.5 percent TiO_2 ." See Id. at 8. Thus, Washington Mills asserts, 3M's reliance on friability as a method of distinguishing semi-friable aluminum oxide from the RBAO covered by the Order is unsupported. See Id.

Washington Mills also contends that semi-friable aluminum oxide and RBAO covered by the Order can be used in many of the same applications with the same results. See Id. at 6-7. For example, both semi-friable aluminum oxide and brown aluminum oxide covered by the Order may be used on grinding wheels, or for sanding wood or paint, with the same result depending on other criteria and bonding material. See Washington Mills Rebuttal at 6. Washington Mills also contends that the cost of semi-friable aluminum oxide is, at most, 20 percent more (and usually not more than 10 percent more) than the brown aluminum oxide covered by the Order. See Id. at 6. Washington Mills also states that, depending on end-use, semi-friable aluminum oxide and the RBAO covered by the Order travel in the same channels of trade, have similar

advertising and ultimate purchaser expectations, and that manufacturers list semi-friable aluminum oxide as part of the range of products for RBAO. See Id. at 8-9.

2. Heat-Treated Aluminum Oxide

Washington Mills contends that heat-treated aluminum oxide is produced in the same manner as the RBAO covered by the Order, except that it undergoes a heat-treatment step, which does not, however, alter its chemical composition, which remains the same as the RBAO covered by the Order. See Washington Mills Rebuttal at 10. Washington Mills further contends that heat-treating aluminum oxide is well within the parameters of the RBAO processing and is similar to other processes that RBAO may undergo, such as densifying, magnetic separation, extrusion, projectivity treatment, acid washing, alkali washing, roasting, calcining, air sweeping, and suspension treatments. See Washington Mills Initial Scope Ruling Request Response (“Washington Mills Initial Response”) (November 3, 2006) at 3.

Washington Mills also contends that while the heat-treatment may change the color of the aluminum oxide, the resulting colors post-treatment range from unchanged brown (light, medium, or dark) to slightly grey, to a deep blue-grey color. See Washington Mills Response at 10. Washington Mills asserts that the depth in the change of color is dependent on the original composition of the RBAO, the grain size, and equipment used to heat-treat the product. See Id. at 10. Petitioner further states that the treatments listed above (*i.e.*, densifying, magnetic separation, extrusion, projectivity treatment, acid washing, alkali washing, roasting, calcining, air sweeping, and suspension) may also affect the color of the RBAO, but do not remove the product from the scope of the Order. See Washington Mills Initial Response at 3.

Washington Mills contends that the uses for heat-treated aluminum oxide and the RBAO covered by the Order overlap and that it would be an effective substitute in all pressure blasting and refractory applications and is one of many varieties of RBAO available to a coated or bonded abrasive producer. See Id. at 11. Washington Mills also states that, depending on end-use, heat-treated aluminum oxide and the RBAO covered by the Order travel in the same channels of trade and have similar advertising and ultimate purchaser expectations, and that the major manufacturers list heat-treated aluminum oxide as part of the range of products for RBAO. See Id.

Legal Framework

The regulations governing the Department’s antidumping scope determinations are found at 19 CFR § 351.225. On matters concerning the scope of an antidumping duty order, the Department first examines the descriptions of the merchandise contained in the petition, the initial investigation, and the determinations of the Secretary (including prior scope determinations) and the U.S. International Trade Commission (ITC). See 19 CFR § 351.225(k)(1). Such scope determinations may take place with or without a formal inquiry. See 19 CFR § 351.225(d) and § 351.225(e). If the Department determines that these descriptions are dispositive of the matter, the Department will issue a final scope ruling as to whether or not the subject merchandise is covered by the order. See 19 CFR § 351.225(d).

Conversely, where the descriptions of the merchandise are not dispositive, the Department will consider the five additional factors set forth at 19 CFR § 351.225(k)(2). These criteria are: (1) the physical characteristics of the merchandise; (2) the expectations of the ultimate purchasers; (3) the ultimate use of the product; (4) the channels of trade in which the product is sold; and (5) the manner in which the product is advertised and displayed. The determination as to which analytical framework is most appropriate in any given scope inquiry is made on a case-by-case basis after consideration of all evidence before the Department,

In the instant case, the Department evaluated 3M's request in accordance with 19 CFR § 351.225(k)(1) and found that the descriptions of the product contained in the petition, the initial investigation, and the determinations of the Secretary (including prior scope determinations) and the ITC were not dispositive with respect to semi-friable aluminum oxide and heat-treated aluminum oxide. Therefore, the Department found it necessary to consider the additional factors set forth at 19 CFR § 351.225(k)(2).

Analysis

With respect to the instant scope request, the Department finds, for the reasons outlined below, that semi-friable aluminum oxide and heat-treated aluminum oxide are within the scope of the Order.

1. Semi-Friable Aluminum Oxide

Physical Characteristics

Both parties have argued extensively over the Al_2O_3 content of semi-friable aluminum oxide. For example, record evidence submitted by Washington Mills, from Taiyuan Twin-tower Aluminum Oxide Inc., reflects that semi-friable aluminum oxide has an Al_2O_3 content between 95 and 97.5 percent,⁴ while 3M asserts that the average Al_2O_3 content of semi-friable aluminum oxide is 97 percent or greater.⁵ Both parties assert that the "normal" Al_2O_3 content for RBAO covered by the Order ranges from 93-97 percent. We note, however, that the Al_2O_3 content of RBAO is not a physical characteristic specifically considered in the scope of the Order. In fact the only discussion related to the Al_2O_3 content of RBAO covered by the Order is in the ITC's preliminary determination.⁶ Specifically, the ITC noted that "In terms of physical characteristics, all aluminum oxide is composed of Al_2O_3 , although white and pink refined aluminum oxide differ in color and are up to 99.9 percent pure in terms of chemistry, compared to RBAO, which is darker and 93-97 percent pure."⁷ Based on record evidence we find that the semi-friable aluminum oxide's Al_2O_3 content is very similar, and in some cases identical, to that found in the RBAO covered by the Order.

⁴ See Washington Mills Response at 7 and Exhibit 1.

⁵ See 3M Scope Request at 14.

⁶ See USITC RBAO from China Investigation No. 731-TA-1022, Determination and Views of the Commission, USITC Publication No. 3572 (January 2003).

⁷ See Id.

Further, this case is distinguishable from the *Cometals* determination, in which the Department determined, under 19 CFR § 351.225(k)(1), that black aluminum oxide was outside the scope of the Order. See *Cometals* at 2. In that case the Department concluded that the descriptions of the product contained in the petition, the initial investigation, and the determinations of the Secretary (including prior scope determinations) and the ITC are dispositive with respect to the product at issue (i.e., black aluminum oxide). And while not a determining factor, it should be noted that the Al₂O₃ content range of black aluminum oxide, as asserted by the parties, was 55-80 percent, well below the 93-97 percent Al₂O₃ content which both Washington Mills and 3M agree is typical of the RBAO covered by the Order. Similarly, semi-friable aluminum oxide can be distinguished from pink and white aluminum oxide, which are “up to 99.9 percent pure in terms of chemistry,” as neither party contends that semi-friable aluminum oxide can be found to have an Al₂O₃ content as high as 99.9 percent.

The next issue that we examined was the semi-friable aluminum oxide TiO₂ content. The range of semi-friable aluminum oxide, as argued by 3M is 1-2 percent, versus the 2-4 percent that they contend is found in the RBAO covered by the Order. However, even if this were always the case, it would mean that a good portion of semi-friable aluminum oxide will very possibly still fall within the 2-4 percent range and have the same TiO₂ as semi-friable aluminum oxide. Thus, it is evident that the chemical composition of semi-friable aluminum oxide and the RBAO covered by the Order are very similar.

A final physical characteristic that the Department looked at was the color of the semi-friable aluminum oxide. 3M contends that semi-friable aluminum oxide is not brown in color, or at least not the same shade of brown as the RBAO covered by the Order, and therefore should not be subject to the scope of the Order. However, after examining record evidence it is evident that semi-friable aluminum oxide can come in several shades of colors including, but not limited to, brown.

Expectations of Ultimate Purchaser

The record evidence suggests that there may be some differences, such as a higher retail price in the expectations of a purchaser of semi-friable aluminum oxide and the RBAO covered by the Order. However, there is also evidence on the record suggesting that the ultimate purchasers' expectations often overlap depending on the chemical make-up and refinement of the RBAO. See Ultimate Use, *infra*.

Ultimate Use

As is the case with the expectations of the ultimate purchaser, there is evidence to support that the higher costs and higher Al₂O₃ content of semi-friable aluminum oxide show different uses from the RBAO covered by the Order. Record evidence shows that it is more suited for high temperature and pressure sensitive items. See 3M Scope Request at 5. However, that is not to say that the two are mutually exclusive in use. Record evidence indicates that the two can be substituted to achieve similar results. See Washington Mills Rebuttal at 7. In looking over product catalogs, it is also evident that semi-friable aluminum oxide is a type of RBAO that a

purchaser might buy when needing a harder, more friable, abrasive. In examining record evidence it is evident that the choice and use is not made based on the name of the product, but the chemical composition, density, ultimate application, and description,⁸ and it is possible to buy higher Al₂O₃ content RBAO that would serve a purpose similar to semi-friable aluminum oxide. This product could also cost a little more than lower Al₂O₃ content RBAO as is the case with semi-friable aluminum oxide. Semi-friable aluminum oxide is one of several different options that a purchaser may choose when wanting to use a tougher, more heat-sensitive abrasive. It is apparent that the ultimate use may be different in some cases between the two, but it is also apparent that some overlap exists.

Channels of Trade

Record evidence indicates that nearly all types of aluminum oxide travel in the same channels of trade. This is first evident by the fact that they are all listed under the same HSTUS, 2818.10.20.00. All forms of aluminum oxide are also generally sold and distributed in a like manner. See 3M Scope Inquiry Comments at 21. It is evident that the various channels of trade also depend on the end use or market served as sales are generally made to manufacturers of abrasive products. These purchases depend on specific properties that will suit the manufacturer's needs. These may include grain size, chemical composition, and type of refinement or treatment to the grain. The manufacturers then typically sell both semi-friable aluminum oxide and RBAO through the same means. See Id. at 21.

Advertised and Displayed

It is clear from record evidence and Department research that semi-friable aluminum oxide is, by name, generally distinguished from other types of RBAO. See 3M Scope Inquiry Comments at Exhibit F and G. It is also evident that there are many different types of RBAO that are distinguished by the name of the product, the chemical composition, density, ultimate application, and description in the same way that semi-friable RBAO is distinguished.⁹ These are all generally listed as types of RBAO or as part of the RBAO product range. See Washington Mills Response at Exhibit 3. This is important due to the price premium that certain types of RBAO carry. It is also important to note that when producers are advertising RBAO, they list the chemical make-up of the product as a way for purchasers to know what they are buying outside of the name of the product. The content of RBAO and semi-friable aluminum oxide can vary between products and companies making the decision of what product to buy solely based on a name incomplete. A purchaser will need to know the chemical composition as well as which treatments have been performed on the RBAO. Record evidence shows that both RBAO and semi-friable aluminum oxide are marketed as coated abrasives and in the same catalogs listed as comparative products with similar and overlapping end-uses. See 3M Scope Inquiry Comments at Exhibit N, pg. 8. These examples indicate that although there are

⁸ See Washington Mills Rebuttal at 5.

⁹ See http://www.specialty-aluminas.alcan.com/gardanne/WebSpecialtyGlobal.nsf/vwUrl/Business_Produits_CREY-5ZDBS9_VI?OpenDocument&Count=9999 at Attachment 1.

differences in the advertising, these differences do not exclude the product from the scope of the Order.

Conclusion

After examining the five aspects of 19 CFR§ 351.225(k)(2) scope analysis regarding semi-friable aluminum oxide: the physical characteristics of the merchandise; the expectations of the ultimate purchasers; the ultimate use of the product; the channels of trade in which the product is sold; and the manner in which the product is advertised and displayed, the Department has determined that semi-friable aluminum oxide is within the scope of the Order. In looking at the totality of the analysis, including the similar chemical characteristics, the overlapping use of the products and purchasers, as well as similar if not identical channels of trade and advertising, it is evident that semi-friable aluminum oxide is a type of refined RBAO within the spectrum of RBAO covered by the scope of the Order.

2. Heat-Treated Aluminum Oxide

Physical Characteristics

In looking at the issue of heat-treated aluminum oxide the Department examined whether the changes that result from the heat-treatment made the aluminum oxide different from the subject RBAO. While the Department acknowledges that there are changes made in the oxidization of the TiO_2 through the heat-treatment process, these changes do not make the heat-treated aluminum oxide chemically different than subject RBAO. The TiO_2 is still within the established RBAO content range of 2-4 percent¹⁰ and record evidence indicates that the heat-treated aluminum oxide is well within what the parties consider the established alumina content range of 93-97 percent¹¹ for RBAO. See 3M Scope Inquiry Comments at 11. This shows that while the heat-treated aluminum oxide may have subtle differences chemically, it is still nearly identical to subject RBAO and not a different product. The heat-treatment is merely another refining process, similar to other treatments applied to RBAO, such as densifying, magnetic separation, extrusion (in various shapes), or projectivity, all of which do not remove RBAO from the scope of the Order, but will raise the cost of the product.

The next physical issue that we looked at was whether the heat-treated aluminum oxide was a different color than brown and, as 3M argues, is thus outside the scope. It is noted that although heat-treating may change the color of the aluminum oxide, it does not do so universally and the resulting color may depend on a number of issues outside of just the heat-treatment process, including grain size, alumina content, and TiO_2 composition. See Petitioner Response at 10. It is also noted that in many cases, including samples that the Department has, that heat-treated aluminum oxide, in many instances, is in fact brown in color. The simple fact that the heat-

¹⁰ See [http://www.specialty-aluminas.alcan.com/gardanne/WebSpecialtyGlobal.nsf/vwUrl/Business_GammeProduit_CREY-5ZDD29_VI/\\$FILE/A_meuSB15.pdf](http://www.specialty-aluminas.alcan.com/gardanne/WebSpecialtyGlobal.nsf/vwUrl/Business_GammeProduit_CREY-5ZDD29_VI/$FILE/A_meuSB15.pdf) at Attachment 2.

¹¹ See Id.

treated aluminum oxide can be and is brown in color in some cases keeps it inside the scope of the Order where color is concerned.

This case is also distinguishable from *Cometals*, in which the Department determined that the descriptions of the merchandise contained in the petition, the initial investigation, and the determinations of the Department were dispositive with respect to black aluminum oxide. Specifically, the Department found that the petition did not cover any colors of aluminum oxide other than brown. Therefore, the Department concluded that black aluminum oxide (which began and remained black in color) was a distinct product from brown aluminum oxide. Here, the product at issue begins as brown aluminum oxide, and often remains brown in color following heat-treatment. Thus, this process does not, in and of itself, exclude the product from the scope of the Order. In addition, the simple fact that the product is called heat-treated refined brown aluminum oxide demonstrates that it is a type of refinement similar to the merchandise covered by the Order.

Expectations of Ultimate Purchaser

Record evidence indicates that purchasers may buy heat-treated aluminum oxide in order to gain a tougher performance than RBAO. See Washington Mills Response at 11. Additionally, record evidence shows that there is a premium for this product over regular RBAO (i.e., 25-75 percent more expensive as alleged by 3M,¹² or 20 percent as alleged by Washington Mills¹³). The Department does not find that either amount is significant enough to exclude the product from the scope of the Order. With such a great range in the price premium asserted by 3M, the range is simply too big to exclude. It is also evident that heat-treatment is one of several methods used to further refine BAO for a tougher performance. It is also evident that the other processes available to improve the “characteristics of abrasive grains,” such as the “addition of impurities and control of crystal grain size” do virtually the same thing as the heat-treated aluminum oxide. See 3M Scope Inquiry Comments at Exhibit J, pg. 356. This description indicates that there are various types of RBAO that can be substituted for each other with similar end-results and that heat-treatment does not provide a unique expectation to the ultimate purchaser that other RBAO cannot fulfill.

Ultimate Use of Product

Record evidence indicates that heat-treated aluminum oxide is better suited for tougher performance jobs than regular RBAO and the treatment process and added toughness is the justification for the price premium. It is also apparent that although one may choose to purchase heat-treated aluminum oxide over RBAO, the record of this inquiry reflects that RBAO treated by other means (i.e. the addition of impurities and control of crystal grain size) may be substituted with similar end results. See 3M Scope Inquiry Comments at Exhibit J, pg. 356. Heat-treated aluminum oxide is still simply subject RBAO that has been heated in order to perform a function similar to that of RBAO, a function that many other types of RBAO can provide and is thus within the scope of the Order.

¹²See 3M Scope Inquiry Comments at 17.

¹³See Washington Mills Response at 13.

Channels of Trade

As was stated above in the semi-friable section, “generally all types of aluminum oxide grains, like other commercially available abrasives, travel in essentially the same channels of trade with respect to distribution and sale.” See 3M Scope Inquiry Comments at 21. This is also evident in that both heat-treated aluminum oxide and RBAO are listed under HSTUS 2818.10.20.00. These products are then generally sold to distributors who sell other RBAO products. However, when these products are sold, they are clearly distinguished and some companies that produce RBAO may not produce heat-treated aluminum oxide. See 3M Scope Inquiry Comments at 21. The grains may also be purchased by manufacturers who will then incorporate them into abrasive products, reselling them as heat-treated aluminum oxide or RBAO products.

Advertised and Displayed

Record evidence indicates that heat-treated aluminum oxide and RBAO are both advertised in a similar manner in the same catalogs and by many of the same companies. Record evidence also shows that both RBAO and heat-treated aluminum oxide are also marketed as coated abrasives and in the same catalogs and listed as comparative products with similar and overlapping end-uses. See 3M Scope inquiry Comments at Exhibit N, pg. 8. Heat-treated aluminum oxide is also advertised as a type of RBAO, with other types listed as well (*i.e.*, products of different grit size, alumina content, or use), and not as a different product.¹⁴ See Washington Mills Response at Exhibit 3. However, they are always distinguished by name and/or by a sub-category to differentiate them and justify the price differences and uses. See *Id.*, at 22. These examples indicate that although there are differences in the advertising, these differences do not exclude the product from the scope of the Order.

Conclusion

In analyzing heat-treated aluminum oxide by means of the 19 CFR§ 351.225(k)(2) criteria, it is evident that this product is simply another refinement of BAO making it within the scope of the order on RBAO form the PRC. The physical changes that result from the heat-treatment process do not remove the aluminum oxide from the scope of the Order as it still remains chemically identical with regards to the alumina and TiO₂ content. It is also evident that the use, advertisement, and channels of trade still remain very similar and in some cases identical, keeping heat-treated aluminum oxide inside the scope of the Order.

¹⁴ See Attachment I.

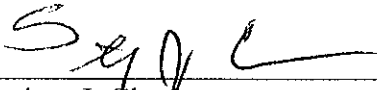
Recommendation

Based upon the above analysis, the Department recommends finding that semi-friable aluminum oxide and heat-treated aluminum oxide from the PRC are within the scope of the Order.

✓

Agree

Disagree



Stephen J. Claeys
Deputy Assistant Secretary
for Import Administration

