

December 28, 2018

Office of Pollution Prevention and Toxics
Mail Code 7401M
ATTN: TSCA Chemical Data Reporting – Partial Exemption Request
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

RE: Partial Exemption Request for Aluminum Oxide (CASRN 1344-28-1)

Dear Sir or Madam,

The Aluminum Association (the “Association”) is submitting this request under the provisions of 40 CFR 711.6(b)(2)(iii)(A) regarding petitions to amend the list of materials partially exempt from Toxic Substances Control Act (TSCA) Chemical Data Reporting (CDR) reporting requirements due to low current interest. We are submitting this request to partially exempt aluminum oxide as a low current interest chemical. We believe that aluminum oxide meets the criteria for the low current interest exemption as outlined in the attached petition package.

The Association originally submitted a request to EPA to partially exempt aluminum oxide from TSCA Inventory Update Rule (IUR) on December 30, 2003. On January 25, 2011, the Association received a response from EPA denying the request. Copies of those correspondences are provided as attachments for reference.

In the January 25, 2011 denial, EPA indicated its reason for denying the petition for partial exemption of aluminum oxide (alumina) as follows-

EPA is denying your petition to exempt aluminum oxide (CASRN 1344-28-1). Aluminum oxide is one of the chemicals to be the subject of a proposed 4(a) test rule. The proposed test rule will require manufacturers, including importers) and processors of certain nanoscale materials, including aluminum oxide, to conduct testing for health effects, ecological effects, and environmental fate as well as to provide material characterization data. The agency, therefore, has a current interest in reviewing the processing and use information for this chemical.

Following this denial, EPA required continued reporting of alumina in both the 2011 and 2015 CDR reporting cycles and that information has now been received and reviewed by EPA. In addition, as regards nanoscale materials specifically, EPA pursued a different path than

proposing a 4(a) test rule to evaluate them. Instead, EPA issued a final rule on January 12, 2017 (82 FR 3641) that noted -

As part of the Agency's effort to ensure a more comprehensive understanding of nanoscale materials in commerce, EPA is issuing a final regulation requiring one-time reporting and recordkeeping of existing exposure and health and safety information on nanoscale chemical substances in commerce pursuant to its authority under TSCA section 8(a). This rule requires companies that manufacture (including import) or process certain chemical substances already in commerce as nanoscale materials notify EPA of certain information, including

- *specific chemical identity;*
- *production volume;*
- *methods of manufacture;*
- *processing, use, exposure and release information; and*
- *available health and safety data.*

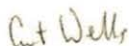
The final rule was effective on August 17, 2017 and all reporting was required to be completed by August 17, 2018. This reporting provided extensive additional information relevant to nanoscale materials (including alumina) such that it, coupled with the information provided in the 2011 and 2015 CDR reporting cycles, provides EPA with the dataset needed to confirm a 'low current interest' in alumina and thus provide for its partial reporting exemption under the provisions of 40 CFR 711.6(b)(2)(iii)(A).

Notably, even if EPA at some point in the future were to propose and finalize a TSCA 4(a) test rule for alumina, that rulemaking would supersede any partial reporting exemption provided under this request.

For the above reasons, the Association requests that the EPA reconsider our request to partially exempt aluminum oxide from the processing and use provisions of the TSCA CDR reporting rule and subsequently add aluminum oxide to the list of substances considered to be of 'low current interest' in 40 CFR 711.6(b)(2)(iv) and therefore not subject to the information reporting provisions of 40 CFR 711.15(b)(4).

The Association looks forward to hearing from EPA regarding its determination in this matter and would be happy to provide further information and/or answer any questions regarding this submittal as needed. For this purpose, I can be reached at (703) 358-2976 or cwells@aluminum.org.

Sincerely,



Curt Wells
Senior Director, Regulatory Affairs
The Aluminum Association

Attachments

- 12/30/03 Partial Exemption Request Letter
- 01/25/11 Denial of Partial Exemption Request Letter

The Aluminum Association

Incorporated

900 19th Street, N.W., Washington, D.C. 20006



December 30, 2003

OPPT Document Control Officer (DCO)
Mailcode 7407M
ATTN: Inventory Update Rule
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Petition for Exemption Status for Aluminum Oxide (CAS Number
1344-28-1)

Dear Sir or Madam:

The Aluminum Association, Inc. requests the U.S. Environmental Protection Agency (EPA) to exempt aluminum oxide (CAS Number 1344-28-1) from the processing and use reporting requirements in the Toxic Substances Control Act (TSCA) Inventory Update Rule Amendments (IURA), codified at 40 C.F.R. Section 710.52(c)(4).

In the January 7, 2003, final rule promulgating the IURA, EPA announced that it was exempting certain chemical substances from reporting processing and use information otherwise required under the IURA. In that rulemaking, EPA also noted that its process "allows anyone to submit a written request for EPA to consider revising the list of chemical substances covered by this partial exemption." This petition is submitted in response to EPA's invitation, and requests that EPA exempt aluminum oxide, particularly the non-fibrous forms, from the processing and use reporting requirements under Section 710.52(c)(4).

According to EPA's August 27, 2002, *Methodology Used for the Initial Selection of Chemicals Inventory Update Rule Amendments (IURA) "Low Current Interest" Partial Reporting Exemption*, EPA looks to the specific circumstances surrounding a chemical substance and considers six criteria in reviewing a request for a partial reporting exemption. These six considerations are: whether the chemical qualifies or has qualified in past IUR collections for reporting on Process and Use information; the chemical substance's chemical and physical properties; the information needs of EPA, other federal agencies, and related entities, including the public; the availability of other complementary risk screening information; the availability of comparable processing and use information; and whether the potential risks of the chemical substance are adequately managed by EPA or another agency or authority. As explained below, aluminum oxide satisfies these criteria and should be partially exempt from IUR reporting requirements.

Before proceeding, the information presented below is preliminary and is intended to satisfy the regulatory requirement that petitions for partial reporting exemptions in the 2006 reporting cycle must be submitted to EPA by January 4, 2004. EPA has not yet clearly specified the type of information it would find useful for purposes of reviewing such petitions beyond what is noted above. Accordingly, The Aluminum Association will supplement this

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petition, as appropriate, as more information becomes available from EPA in this regard, and expressly reserves the right to do so.

Aluminum Oxide Qualifies for Reporting on Process and Use Information

Based on information and belief, aluminum oxide qualifies for reporting on process and use information under the IURA because at least one site manufactures or imports 300,000 pounds or more of aluminum.

Aluminum Oxide's Chemical and Physical Properties and Its Potential for Persistence, Bioaccumulation, Health Effects, or Environmental Effects Demonstrate That It Is a Low Hazard Chemical and Should Be Considered of Low Current Interest for IUR Purposes

Aluminum oxide poses little or no adverse health or environment effect and thus should be considered of low interest to EPA. EPA's concurrence with this statement is evidenced in EPA's decision to delist non-fibrous forms of aluminum oxide from Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). Although aluminum

oxide originally was a listed Section 313 chemical, EPA granted The Aluminum Association's September 30, 1988, petition to delist non-fibrous forms of aluminum oxide.¹ EPA stated:

It is EPA's determination that available data do not demonstrate that non-fibrous forms of [aluminum oxide] cause or can reasonably be anticipated to cause significant adverse human health or environmental effects. Non-fibrous [aluminum oxide] was found to have only weak fibrogenic potential and was not found to cause cancer or serious or irreversible pulmonary disease.

Aluminum Oxide Is Well Studied and There Are No Information Needs

EPA delisted aluminum oxide from EPCRA Section 313 because EPA concluded, after a detailed and careful review of the available literature, that "available data do not demonstrate that non-fibrous forms of [aluminum oxide] cause or can reasonably be anticipated

¹ 55 Fed. Reg. 5220 (Feb. 19, 1990). Aluminum oxide was listed under Section 313 because when drafting the legislation, Congress used the State of Maryland's classification of aluminum oxide as a toxic air pollutant. Maryland has since removed aluminum oxide from its toxic air pollutant list. See The Aluminum Association, *Petition Submitted to Remove Aluminum Oxide from the List of Toxic Chemicals in SARA Section 313* (40 CFR 372.65) (Sept. 30, 1988).

to cause significant adverse human health or environmental effects.” If there were any uncertainty regarding the toxicity of aluminum oxide, EPA would not have granted The Aluminum Association’s petition to delist aluminum oxide.

In recent years, aluminum has been reviewed by several federal and international regulatory agencies, including ATSDR,² Environment Canada and Health Canada,³ and the International Programme on Chemical Safety (IPCS),⁴ which is a joint venture of the United Nations Environment Programme, the International Labour Organization, and the World Health Organization. These reviews included data on both aluminum and aluminum oxide. None of these agencies raised issues regarding aluminum oxide.

² Agency for Toxic Substances and Disease Registry (ATSDR), *Toxicological Profile for Aluminum* (July 1999) (Toxicological Profile), available at <http://www.atsdr.cdc.gov/toxprofiles/tp22.pdf>

³ Environment Canada and Health Canada, *Priority Substances List: State of the Science Report for Aluminum Chloride, Aluminum Nitrate and Aluminum Sulfate* (Dec. 2002) (State of the Science Report).

⁴ IPCS, *Environmental Health Criteria 194: Aluminum* (1997), available at <http://www.inchem.org/documents/ehc/ehc/ehc194.htm>.

Comparable Processing and Use Information Already Exists on Aluminum Oxide

ATSDR's Toxicological Profile includes the following information regarding aluminum oxide production:

Annual production capacity for aluminum oxide (alumina, calcined, reduction grade) in thousand metric tons was 4,896 (10.8 billion pounds), 5,245 (11.6 billion pounds), 4,980 (11 billion pounds), 4,980 (11 billion pounds), and 5,035 (11.1 billion pounds) in 1988, 1990, 1992, 1994, and 1995, respectively (SRI 1988, 1990, 1992, 1994, 1995).⁵

The Toxicological Profile also provides use information for aluminum oxide:

Aluminum oxide is used in the production of aluminum; manufacture of abrasives, refractories, ceramics, electrical insulators, catalyst and catalyst supports, paper, spark plugs, crucibles and laboratory works, adsorbent for gases and water

⁵ Toxicological Profile at 177.

vapors, chromatographic analysis, fluxes, light bulbs, artificial gems, heat resistant fibers, food additive (dispersing agent), and in hollow-fiber membrane units used in water desalination, industrial ultrafiltration, and hemodialysis (HSDB 1995).⁶

*Risks, If Any, from Aluminum Oxide Are Adequately Managed by EPA
and Other Authorities*

Aluminum oxide is already and adequately regulated by EPA and the Occupational Safety and Health Administration (OSHA). Fibrous forms of aluminum oxide, the only form of aluminum oxide that EPA has determined it has any regulatory interest in addressing, remain listed on Section 313 of EPCRA. OSHA has established a permissible exposure limit (PEL) for aluminum oxide dust of 15 milligrams per cubic meter (mg/m³) of air.⁷

For the reasons noted above, The Aluminum Association urges EPA to exempt aluminum oxide from the processing and use reporting requirements in the TSCA IURA.

⁶ Toxicological Profile at 180-181.

⁷ 29 C.F.R. § 1910.1000, Table Z-1.

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December 30, 2003
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If you have any questions regarding this request, please call me at (202) 862-5132
or email me at bstriete@aluminum.org. Your consideration is appreciated.

Sincerely,

Robert P. Strieter
Vice President, Environment, Health & Safety

cc: Mark Mazanec, Baker & Hostetler



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 25 2011

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Mr. Robert P. Strieter
Vice President, Environment, Health & Safety
The Aluminum Association Inc.
1525 Wilson Blvd
Suite 600
Arlington, VA 22209

Re: Petitions for Partial Exemption from Inventory Update Reporting Requirements

Dear Mr. Strieter:

Thank you for the reminder, included in your comments on the IUR Modifications proposed rule, of this office's commitment to revisit IUR petitions for partial exemptions on which the Agency deferred action until after the 2006 IUR. We are considering your other comments on the proposed rule, and will respond to them as part of the regulatory process.

EPA has re-evaluated your petitions requesting that aluminum (CASRN 1344-28-1) and aluminum oxide (CASRN 1344-28-1) be exempted from the reporting of processing and use information under the Inventory Update Reporting (IUR) rule (See 40 CFR 710.46(b)(2)(iv)). For the reasons explained below, EPA is denying your petition for both aluminum and aluminum oxide.

In the 2006 letter, the Agency indicated that the manufacturers of chemicals listed at 40 CFR 710.46(b) are exempt from reporting the processing and use information required by 40 CFR 710.52(c)(4). Chemical substances are included on this list only if EPA has determined that there is low current interest in the processing and use information for that substance. As you are aware, in 2006 reporting for inorganic chemicals was limited to manufacturing information only. The 2011 IUR will mark the first time that processing and use information for inorganic chemicals, like aluminum and aluminum oxide, are reported.

EPA is denying your petition to exempt aluminum oxide (CASRN 1344-28-1). Aluminum oxide is one of the chemicals to be the subject of a proposed Section 4(a) test rule. The proposed test rule will require manufacturers (including importers) and processors of certain nanoscale materials, including aluminum oxide, to conduct testing for health effects, ecological

effects, and environmental fate as well as to provide material characterization data. The Agency, therefore, has a current interest in the IUR processing and use information for this chemical.

EPA is denying your petition to exempt aluminum (CASRN 1344-28-1) because the 2011 IUR will mark the first time that processing and use information will be reported. EPA is interested in reviewing the processing and use information for this chemical.

Information concerning your petitions can be found in EPA's docket number EPA-HQ-OPPT-2004-0049 and EPA-HQ-OPPT-2004-0050. Please contact Karen Hoffman at 202-564-8158 or hoffman.karen@epa.gov with any questions.

Sincerely,

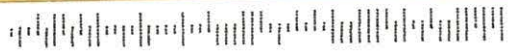
A handwritten signature in black ink, appearing to read "Wendy Cleland-Hamnett". The signature is fluid and cursive, with a long horizontal stroke at the end.

Wendy Cleland-Hamnett, Director
Office of Pollution Prevention and Toxics

Enclosures:

Docket number EPA-HQ-OPPT-2004-0049

Docket number EPA-HQ-OPPT-2004-0050



The Aluminum Association
1400 Crystal Drive, Suite 430
Arlington, VA 22202

JAN

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Mail Code 7401M
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