

Summary Information and Guidance on DHS Chemical Facility Anti-Terrorism Standards (CFATS) Aluminum Powder, Paste, and Flake

The U.S. Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) lists aluminum powder as a Chemical of Interest (COI) in Appendix A. DHS has identified aluminum powder as a security concern for possible theft/diversion and for use in explosive devices (EXP/IEDP). DHS has interpreted powder to include aluminum paste and flake, and DHS established a 100 pound Screening Threshold Quantity (STQ) for aluminum powder, paste and flake.

Definition of aluminum powder as a COI

In response to questions about aluminum powder, DHS published FAQ 1291 to define what qualifies under the aluminum COI.

The minimum concentration is A Commercial Grade (ACG), defined as “any quality or concentration of a chemical of interest offered for commercial sale that a facility uses, stores, manufactures, or ships”. 6 CFR § 27.105. Therefore, a facility must count any commercial grade of aluminum powder (including paste and shaving) toward the STQ. Consistent with 6 CFR § 27.203(a)(6), a facility need not consider the aluminum powder contained in articles, such as paints, inks, or dyes.

How to determine if a specific product is in an article?

If your material is paint, ink or other product that contains aluminum powder, paste or flake, then it most likely is an article. Check the Safety Data Sheet (SDS) that accompanies the product to see if it contains aluminum powder, paste or flake. The best way to find out about an intermediate product is to contact DHS and ask for a Compliance Assistance Visit at <http://www.dhs.gov/cfats-request-compliance-assistance-visit>. The DHS inspectors can help with this issue and you can document the visit's results.

Top Screen Survey

Any facility that manufactures, uses, stores or distributes aluminum powder, paste or flake at or above the STQ (100 lbs.) is required to complete a Chemical Security Assessment Tool (CSAT) Top-Screen survey. The deadline for submission of Top Screens required by the standard was 60 calendar days from the date of publication of Appendix A in the Federal Register. See: <http://www.dhs.gov/csat-top-screen> and <http://www.dhs.gov/chemical-security-assessment-tool>.

Source: DHS Website - <http://www.dhs.gov/chemical-facility-anti-terrorism-standards>

The Aluminum Association and its member companies make no warranty, expressed or implied, and assume no responsibility or liability with respect to the information and recommendations contained in this guidance document. If your company possesses aluminum powder, paste or flake, the Association advises that you contact DHS to determine if the CFATS regulations are applicable to your operations.

Security Vulnerability Assessment

Following DHS review of a facility's Top-Screen submission, the facility may be notified in writing that it is required to complete and submit a CSAT Security Vulnerability Assessment (SVA). A facility that receives such a letter is initially considered high-risk and preliminarily assigned to Tier 1, 2, 3, or 4. Unless specifically notified by DHS to the contrary, the SVA must be submitted within 90 calendar days from the date of written notification. Preliminary Tier 4 facilities, however, may elect to submit an Alternative Security Program (ASP) in lieu of an SVA. See: <http://www.dhs.gov/csat-security-vulnerability-assessment>.

Site Security Plan

Following review of a facility's SVA, DHS will either confirm that the facility is high-risk and subject to CFATS, or is not a risk and not subject to CFATS. For facilities confirmed as high-risk, DHS will communicate the Tier designation and instructions on completion of a Site Security Plan (SSP). Unless otherwise notified by DHS, high-risk facilities have 120 days from the time of written notification to complete and submit a CSAT SSP or a DHS-approved ASP. See: <http://www.dhs.gov/csat-site-security-plan> and https://www.dhs.gov/xlibrary/assets/chemsec_cfats_riskbased_performance_standards.pdf.

Inspection and Approval

DHS conducts on-site inspections/audits of all the tiered facilities, and typically recommends security improvements, before approving a facility's SSP. DHS inspects high-risk facilities at regular intervals with tier-1 facilities being inspected more frequently. Inspectors may also inspect a facility at any time based on new information or security concerns. Depending on particular circumstances, DHS will provide facilities with a minimum of 24 hours advance notice for compliance inspections, unless specific security concerns or exigent circumstances demand immediate attention.

Facilities that have successfully implemented their approved SSPs and have passed an inspection will be considered as compliant with the required performance standards. See: <http://www.dhs.gov/chemical-facility-anti-terrorism-standards-facility-inspections>.

Notes on CFATS and COI

In developing the COI list in Appendix A, DHS looked to existing expert sources of information including other federal regulations related to chemicals. See: <http://www.dhs.gov/how-appendix-chemicals-interest-was-developed>.

DHS referenced the following sources in developing Appendix A:

- Chemicals covered under the Environmental Protection Agency's Risk Management Program;
- Chemicals included in the Chemical Weapons Convention;

- Hazardous materials, such as gases that are poisonous by inhalation; and
- Explosives regulated by the Department of Transportation.

DHS identified three security issues related to chemicals:

- Release - Toxic, flammable, or explosive chemicals or materials that, if released from a facility, have the potential for significant adverse consequences for human life or health.
- Theft or Diversion - Chemicals or materials that, if stolen or diverted, have the potential to be misused as weapons or easily converted into weapons using simple chemistry, equipment or techniques, in order to create significant adverse consequences for human life or health.
- Sabotage or Contamination - Chemicals or materials that, if mixed with readily available materials, have the potential to create significant adverse consequences for human life or health.

DHS consulted with the FBI Explosives Unit to set the STQ at 100 pounds for aluminum powders.

When to include aluminum powder, paste and flake in STQ

In the DHS CFATS regulations, specifically 27.203(c), DHS directs companies to only count theft/diversion chemicals of interest when contained in transportation packaging that meets the minimum DOT packing requirements.

In § 27.203(c), DHS provides that facilities shall only count theft/diversion chemicals of interest that are in a transportation packaging. DHS has adopted the Department of Transportation (DOT) definition of packaging, which refers to “a receptacle and any other components or materials necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements of [DOT’s Hazardous Materials Regulations].” See 49 CFR 171.8. This includes, but is not limited to, cylinders, bulk bags, bottles inside or outside of a box, cargo tanks, and tank cars. DHS has focused the universe of theft/diversion chemicals of interest in this fashion, because the theft/diversion security issue revolves around portable and transportable amounts of certain chemicals. DHS is concerned about both the theft of portable amounts of these chemicals and the diversion of shipments of these chemicals.

Our interpretation of this regulation is that any aluminum powder, paste or flake that are in the production process, unless contained in a container that conforms to the minimum packing requirements by DOT, should not be counted in the STQ. Only include aluminum powder, paste and flake in your possession that are contained in packaging that meets minimum DOT requirements.