



Safety Data Sheet

SDS No. 353A

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Aluminum Powder
General Use: Pigment
Manufacturer: Smooth-On, Inc.,
5600 Lower Macungie Rd., Macungie, PA 18062
Phone (610) 252-5800, FAX (610) 252-6200
Emergency Contact: Chem-Tel
Domestic: 800-255-3924 International: 813-248-0585

Section 2 - Hazards Identification

Classification of the substance or mixture

This product is considered hazardous under 29 CFR 1910.1200 (combustible dust).

Serious eye damage/eye irritation – Class 2B

Specific target organ toxicity, single exposure: Respiratory tract irritation – Category 3

GHS Label elements, including precautionary statements



Pictogram(s):

Signal Word: Warning

| | | |
|-------------------------|--------------------|--|
| Health Hazards: | H320 | Causes eye irritation |
| | H335 | May cause respiratory irritation |
| General Precautions: | P101 | If medical advice is needed, have product container or label at hand. |
| | P102 | Keep out of reach of children. |
| | P103 | Read label before use. |
| Prevention Precautions: | P261 | Avoid breathing dust. |
| | P264 | Wash skin thoroughly after handling. |
| Response Precautions: | P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| | P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| Storage Precautions: | P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| Disposal Precautions: | P501 | Dispose of contents/container according to local, state and federal laws. |

Hazards not otherwise classified (HNOC) or not covered by GHS – The mixture does not meet the criteria for classification given in the Regulation (EC) No. 1272/2008 (CLP), Annex VI, Note T. Aluminum powders were tested by the United States Department of Interior Bureau of Mines in 1991, under UN criteria and found not to meet the definition of hazard class 4 (flammable solid).

Section 3 - Composition / Information on Ingredients

The following ingredients are hazardous according to OSHA criteria.

| CAS | Component | Concentration |
|-----------|-----------|---------------|
| 7429-90-5 | Aluminum | >99% |

Section 4 - First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Consult physician.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person. Dilute by drinking water. Recommend quantities up to 1 oz. in children and 9 oz. in adults. Consult a physician.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Use gentle surface application of Class D extinguishing media or dry sand to cover and ring the burning material. If possible, isolate the burning material. Allow the fire to burn out. Do not disturb the material until completely cool

Unusual Fire or Explosion Hazards: Do not use water, halogenated agents and ABC dry chemical agents. Dust or fines dispersed in the air can be explosive. Dust or fines in contact with water can generate flammable/explosive hydrogen gas. Dust or fines in contact with metal oxides can react with considerable heat generation and can be initiated by a weak ignition source.

Further information: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak procedures: Do not use water for spill clean up. Only properly protected personnel should remain in the spill area; dike and contain spill; sweep or gather up excess into suitable container for disposal; avoid dust formation; cover with dry earth, dry sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Stop or reduce discharge if it can be done safely.

Environmental precautions: Do not allow spillage to enter drains or waterways.

Section 7 - Handling and Storage

Handling Precautions: Do not handle or store near an open flame, heat or other sources of ignition. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use good general housekeeping procedures. Wash hands after use.

Storage Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Avoid water contamination.

Section 8 - Exposure Controls / Personal Protection

Occupation exposure limits for aluminum (CAS 7429-90-5) as dust:

| | | |
|----------------|-----|---|
| OSHA | TWA | 15 mg/m ³ (aluminum) |
| OSHA Table Z-1 | PEL | 5 mg/m ³ (atomized aluminum) |
| | TWA | 15 mg/m ³ (aluminum) |
| ACGIH | TWA | 1 mg/m ³ (atomized aluminum) |
| | TWA | 1 mg/m ³ (aluminum) |

Respiratory Protection: Follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with dust filters.

Hand Protection: Wear any liquid-tight gloves such as butyl rubber, neoprene or PVC.

Eye Protection: Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash thoroughly after handling.

Section 9 - Physical and Chemical Properties

Appearance : silver-grey powder
Odor/Threshold: odorless
pH: N.A. (non-aqueous)
Melting Point/Freezing Point: 1195-1215 °F
Low/High Boiling Point: Not available
Flash Point: Not applicable
Evaporation Rate: Not applicable
Flammability: Not applicable
UEL/LEL: lower flammability limit 40 mg/l

Vapor Pressure: Not applicable
Vapor Density (Air=1): Not applicable
Specific Gravity (H₂O=1, at 4 °C): 2.6
Water Solubility: Insoluble
Partition coefficient: Not applicable
Auto-ignition temperature: 1202 °F
Decomposition temperature: Not available
Viscosity: Not applicable
% Volatile: Nil

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Water; acids and alkalis; strong oxidizers; halogenated compounds; iron oxide and other metal oxides; iron powder and water

Hazardous Decomposition Products: No hazardous decomposition products are known.

Section 11- Toxicological Information

Skin Corrosion/Irritation: Can cause mechanical irritation.

Serious Eye Damage/Irritation: Can cause mechanical irritation.

Respiratory/Skin Sensitization: Can cause irritation of the upper respiratory tract.

Germ Cell Mutagenicity: no data

Carcinogenicity: ACGIH Class A4 – Not classifiable as a human carcinogen.

Reproductive Toxicity: no data

Specific Target Organ Toxicity – Single Exposure: no data

Specific Target Organ Toxicity – Repeated Exposure: no data

Aspiration Hazard: no data

Acute Toxicity: no data

Chronic Exposure: no data

Potential Health Effects – Miscellaneous: no data

Section 12 - Ecological Information

Toxicity: LC50 *Oncorhynchus mykiss* (rainbow trout) – 0.16 mg/l, 96 h

Persistence and Degradability: This product is not biodegradable.

Bioaccumulative Potential: The product does not contain any substances expected to be bioaccumulating.

Mobility in Soil: Not considered mobile.

Other Adverse Effects: no data

Section 13 - Disposal Considerations

Disposal: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information

| DOT | IATA | IMDG |
|---------------|---------------|---------------|
| Not Regulated | Not Regulated | Not Regulated |

Section 15 - Regulatory Information

TSCA Inventory Status (40 CFR 710): All components of this formulation are listed in the TSCA Inventory.

CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

SARA Categories:

311/312 hazard categories: Pressure Hazard (if dust clouds are generated)

302 Extremely hazardous substance: Yes

311/312 Hazardous chemical: No

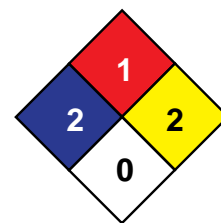
313 (TRI reporting): aluminum (CAS 7429-90-5)

California Proposition 65: This product does not contain any chemicals which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

States Right-To-Know: MA, NJ, PA, RI

16 - Other Information

| HMIS | |
|------|---|
| H | 2 |
| F | 1 |
| R | 2 |



NFPA

Revision: 1

Date Prepared: May 12, 2015

Other information:

Aluminum Association Bulletin TR-2, "Recommendations for Storage and Handling of Aluminum Pigments and Powders." The Aluminum Association, 1525 Wilson Blvd., Suite 600, Arlington, VA 22209

Glossary: ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association; IMDG-International Maritime Dangerous Goods Code; LC-Lethal Concentration; LD-Lethal Dose; LEL-Lower Explosion Level; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; UEL-Upper Explosion Level; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

Disclaimer: The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

This SDS is prepared to comply with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as prescribed by the United States (US) Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 (REACH).

Classifications of the chemical in accordance with 29 CFR 1910.1200, signal word, hazard and precautionary statement(s), symbol(s) and other information are based on listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS and EC No 1907/2006 and are considered trade secrets under US Federal Law (29 CFR and 40 CFR), Canadian Law (Health Canada Legislation), and European Union Directives.