

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: AEROXIDE® Alu C 2nd Grade**Chemical name:**
Aluminium oxide**Other means of identification****CAS Number:** 1344-28-1**Recommended restrictions****Recommended use:** Antiblocking agents Paper**Restrictions on use:** Not known.**Manufacturer/Importer/Distributor Information****Company Name** : Evonik Corporation
299 Jefferson Road
Parsippany, NJ 07054
USA**Telephone** : +1 973 929 8000**Fax** : +1 973 929 8040**E-mail** : product-regulatory-services@evonik.com**Emergency telephone number:**

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency : 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Not classified

Label Elements**Hazard Symbol:** No symbol**Signal Word:** No signal word.**Hazard Statement:** Not applicable**Precautionary Statements**

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Chemical name:
Aluminium oxide

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Aluminium oxide		1344-28-1	

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

- Inhalation:** In case product dust is released: Possible discomfort: cough, sneezing Move victims into fresh air.
- Skin Contact:** Gently wash with plenty of soap and water.
- Eye contact:** In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.
- Ingestion:** If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.
- Personal Protection for First-aid Responders:** As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

Most important symptoms/effects, acute and delayed

- Symptoms:** No data available.
- Hazards:** None known.

Indication of immediate medical attention and special treatment needed

- Treatment:** After absorbing large amounts of substance: Administration of activated charcoal: Acceleration of gastrointestinal passage.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Product name: AEROXIDE® Alu C 2nd Grade

Suitable extinguishing media: Water spray, foam, CO₂, dry powder. Adapt fire-extinguishing measures to surroundings

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical: None known.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Methods and material for containment and cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental Precautions: Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Ensure suitable suction/aeration at the work place and with operational machinery. Local ventilation if necessary. see also section 7.

Safe handling advice: Handle in accordance with good industrial hygiene and safety practice. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. If the workplace threshold limit value is exceeded and/or the substance is released, use appropriate respiratory protection. Use with adequate ventilation. Minimize the escape of dust from process equipment and ventilation systems.

Contact avoidance measures: No data available.

Hygiene measures: When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Avoid clothing from being contaminated with the product. Wash contaminated clothing after use. To ensure ideal skin protection: use super fatted soaps and skin cream for skin care.

Storage

Safe storage conditions: Take precautionary measures against static discharges. Keep containers tightly closed in a dry, cool place.

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Aluminium oxide - Respirable fraction.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)
	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Aluminium oxide - Total dust.	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Aluminium oxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminium oxide - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)

Appropriate Engineering Controls

Ensure suitable suction/aeration at the work place and with operational machinery. Local ventilation if necessary. see also section 7.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

Skin Protection

Hand Protection:

Additional Information: Protective gloves, nitrile rubber (NBR), butyl rubber, PVC
 Additional Information: The material thickness and rupture time data do not apply to non-solute solids / dusts.
 Additional Information: The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use., Use impermeable gloves.

Skin and Body Protection:

A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hygiene measures: When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. Avoid clothing from being contaminated with the product. Wash contaminated clothing after use. To ensure ideal skin protection: use super fatted soaps and skin cream for skin care.

9. Physical and chemical properties

Appearance

Physical state:	solid
Form:	Powder
Color:	White
Odor:	odourless
Odor Threshold:	Not applicable
pH:	4 - 6 (40 g/l, 20 °C) Suspension
Melting Point:	Approximate 2,050 °C
Boiling Point:	Not determined.
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Explosive limit - upper:	Not applicable
Explosive limit - lower:	Not applicable
Vapor pressure:	Not applicable
Vapor density (air=1):	No data available.
Density:	Approximate 3.27 g/cm ³ (20 °C)
Relative density:	No data available.
Solubility in Water:	hardly soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Self Ignition Temperature:	Not applicable
Decomposition Temperature:	> 2,000 °C
Kinematic viscosity:	Not applicable solid
Dynamic viscosity:	Not applicable solid

Other information

Explosive properties:	Not to be expected in view of the structure
Oxidizing properties:	Not to be expected in view of the structure
Minimum ignition energy:	Not applicable
Minimum ignition temperature:	Not applicable

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No hazardous reactions are known if properly handled and stored.
Conditions to avoid:	Avoid dust formation.
Incompatible Materials:	Strong acids and strong bases
Hazardous Decomposition Products:	Exothermic reactions of aluminum oxide above 200°C with halocarbon vapors produces toxic HCl and phosgene.

11. Toxicological information

General information: If the recommended workplace concentration of the product is exceeded the respiratory tract may be mechanically overcharged as with other fine dusts.

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: LD 50 (Rat): > 5,000 mg/kg comparable product

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product: (Target Organ(s): lungs / sediments in the lungs, lungs / no evidence of fibrosis, no pathological changes) literature

Skin Corrosion/Irritation

Product: Not irritating OECD 404 (Rabbit): Not irritating

Serious Eye Damage/Eye Irritation**Product:** Not irritating Rabbit: Not irritating**Respiratory or Skin Sensitization****Product:** Magnussona i Kligmana., OECD 406 (Guinea Pig): not sensitizing comparable product Based on available data, the classification criteria are not met.**Carcinogenicity****Product:** Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA. No evidence that cancer may be caused.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity**In vitro****Product:** Ames test (literature): negative**In vivo****Product:** No data available.**Reproductive toxicity****Product:** no evidence of reproductiontoxic properties**Specific Target Organ Toxicity - Single Exposure****Product:** no evidence for hazardous properties**Specific Target Organ Toxicity - Repeated Exposure****Product:** no evidence for hazardous properties**Aspiration Hazard****Product:** Not classified**Other effects:**

An Expert Judgment stated that no classification is necessary based on present knowledge.

12. Ecological information**Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** LC 50 (Salmo trutta, 96 h): > 100 mg/l literature

Aquatic Invertebrates**Product:** EC 50 (Daphnia magna, 48 h): > 100 mg/l literature**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100 mg/l literature**Persistence and Degradability****Biodegradation****Product:** The methods for determining biodegradability are not applicable to inorganic substances.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** Not to be expected.**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: Not applicable**Mobility in soil:**

No remarkable mobility in soil is to be expected.

Other adverse effects:

An Expert Judgment stated that no classification is necessary based on present knowledge.

13. Disposal considerations**Disposal methods:**

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Contaminated Packaging:

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information**Domestic regulation****49 CFR**

Not regulated as a dangerous good

Remarks : Not dangerous according to transport regulations.

International Regulations**UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information**US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Not classified

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

<u>Chemical Identity</u>	<u>% by weight</u>
Aluminium oxide	1.0%

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

<u>Chemical Identity</u>
Aluminium oxide

US. Massachusetts RTK - Substance List**Chemical Identity**

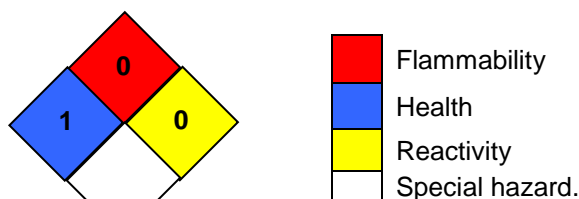
Aluminium oxide

US. Pennsylvania RTK - Hazardous Substances**Chemical Identity**

Aluminium oxide

US. Rhode Island RTK**Chemical Identity**

Aluminium oxide

16. Other information, including date of preparation or last revision**NFPA Hazard ID**

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 07/14/2020**Version #:** 1.0**Further Information:** No data available.**Revision Information** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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