

SAFETY DATA SHEET
EC No.1907/2006 (EEC 93/112; EEC2001/58)
Brown Fused Aluminium Oxide (Al₂O₃)

Printing date
1 February 2022

1. CHEMICAL PRODUCT

1.1. Product

Trade name:

Brown Fused Aluminium Oxide

1.2. Trader's name:

PJSC "Zaporozhsky Abrasivny Combinat"

Address:

Oleksiya Porody str. 44

Ukraine 69014 Zaporozhye

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export@abrasive.zp.ua

2. HAZARDOUS IDENTIFICATION

2.1. Classification of the substance/preparation according to Regulation (EC) 1272/2008 (CLP):

Not officially listed hazardous substance

2.2. Classification of the substance/preparation according to Directive 1999/45/EC:

No specific toxicity described, no R- or H-Phrases

2.3. Label elements according to Regulation (EC) 1272/2008 (CLP):

No Labelling required

3. COMPOSITION

Chemical Characteristic (active ingredient):

Definition according to ES directive:

Aluminium oxide (Al₂O₃)

CAS no.:

1344-28-1

EINECS no.:

215-691-6

4. FIRST AID MEASURES:

4.1. Description of first aid measures:

General comments:

Take medical advice if symptoms occur or in cases of doubt.

Inhalation:

Move exposed person to fresh air. Get medical attention if symptoms occur.

Skin contact:

No special action required, remove mechanically and flush with water.

Eye contact:

Flush with plenty of water. Seek medical advice if irritation persists.

Ingestion:

No special action required. Seek medical advice if irritation persists.

4.2. Most important symptoms and effects, both acute and delayed:

Pulmonary irritation, local rashes, itching, coughing.

4.3. Indication of any immediate medical attention and special treatment needed:

None.

5. FIRE FIGHTING MEASURES

5.1. Generally:

Not inflammable. Inflammable. Packaging.

5.2. Suitable extinguishing media:

Use extinguishing measures appropriate to the source of the fire.

5.3. Extinguishing media which must not be used for safety reasons:

None known.

5.4. Special exposure hazards arising from substance itself, combination products, resulting gases:

None known.

5.5. Special protective equipment:

Use a filtration half mask (EN 149), P3 (filter min. 99,95% air particulates).

6. ACCIDENTAL RELEASE MEASURES

- | | |
|-------------------------------|--|
| 6.1. Personal precautions: | Avoid dust formation (see also item 8.3.) |
| 6.2. Environment precautions: | No special measures required |
| 6.3. Methods for cleaning up: | Take up mechanically and dispose of in accordance to regulations |

7. HANDLING AND STORAGE

- | | |
|--|---|
| 7.1. Handling: | |
| Precautions for safe handling: | Avoid dust formation |
| Precautions against fire and explosion | No danger of fire and dust explosion |
| 7.2. Storage | |
| Conditions of storage rooms and vessels: | Store in accordance with local regulatios.
Avoid creating dusty conditions and prevent wind dispersal. |
| Advice of storage of incompatible materials: | None |
| Further information of storage: | None |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters:

Occupational exposure limits:

Country	Product	CAS-Nr.	Note	Identifier	TWA (mg/m ³)	STV (mg/m ³)	STV (min)	Source)
UA	General dust limit		I	AGW	10	20	15	TRGS 900
UA	General dust limit		I	MAK	4			DFG
UA	General dust limit		R	AGW	1.25	2.4	15	TRGS 900
UA	General dust limit		R	MAK	0.3	2.4	15	DFG
UA	General dust limit	1344-28-1	I dust	MAK	4.1.5			DFG
UA	General dust limit	1344-28-1	I dust	MAK				DFG

Notice:

I: inhalable fraction

STV: short term value (short-term exposure limit): A limit value above which exposure should not occur and which is related to a 15 minute period unless otherwise specified.

R: alveolar fraction

TWA: time-weighted average (long term exposition limit) mesured or calculated in relation to a reference period of eight-hours time-weighted average.

Relevant DNEL-/DMEL-/PNEC- and other thresholds

Relevant values for human health protection:

Type	Limit	Protection target, way of exposure
DNEL	15.63 mg/m ³	Human, inhalation
DNEL	3.29 mg/m ³	Human, oral

Relevant values for the environment:

Type	Limit	Organism
PNEC	74.9 µg/l	Aquatic organisms
PNEC	20 mg/l	Microorganisms

8.2. Exposure control:

Appropriate engineering controls: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommender or statutory limits.

Individual protection measures:

Eye/face protection: The use of a protective eyewear with side protectors is recommended.

Skin protection:

Hand protection: Wear suitable protection gloves.

Body protection: No special protective clothing is required.

Otherskin protection: Skin recovery phase should be organized. Preventive skin protection is recommended (protective cream etc.). Wash hands after handling the material. Wear appropriate work clothes.

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.

Respiratory protection: Respirators must be used according to a respiratory protection program to ensure proper fitting, training and other important aspects and use.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1. Appearance:

Form: Crude, grain, powder
Colour: Grey, brown, black
Odour: Odorless

9.2. Safety parameters:

Change in physical state: Melting point appr. 2000 C

Flash point: Not applicable
Flammability: Not applicable
Ignition temperature: Not applicable
Auto flammability: Not applicable
Oxidizing properties: Not applicable
Explosive properties: Not applicable
Explosive limits: Not applicable
Vapor pressure: Not applicable
Bulk density: Approx. 500-2500 kg/m³
3.60-4.00 g/cm³

Specific gravity: Insoluble
Solubility in water: Not applicable
pH-value: Not applicable
Partition coefficient n-Octanol / water:

10. STABILITY AND REACTIVITY

- 10.1. Reactivity: No specific test data related to reactivity available for this product or its ingredients.
- 10.2. Chemical stability: The product is stable.
- 10.3. Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4. Conditions to avoid: Not applicable
- 10.5. Materials to avoid: Not applicable
- 10.6. Hazardous decomposition: Not known

11. TOXICOLOGICAL INFORMATION

- 11.1. General information: No hazardous effects known, if used under normal conditions.
- 11.2. Acute toxicity: Not known
- 11.3. Irritation: No significant irritation expected other than possible mechanical irritation.
- 11.4. Carcinogenicity: No harmful effects identified, based on available date.
- 11.5. Mutagenicity: No harmful effects identified, based on available date.
- 11.6. Toxicity for reproduction: No harmful effects identified, based on available date.

12. ECOLOGICAL INFORMATION

- 12.1. Information on elimination (persistence and degradability): Chemically inert and insoluble in water. Separation by mechanical processes (sedimentation, filtration etc.)
- 12.2. Results of PBT and vPvB assessment: Aluminium oxide is not a PBT or vPvB substance
- 12.3. Ecotoxicity: No harmful effects on water organisms anticipated. The substance is highly insoluble in water.
- 12.4. Bio accumulative potential: No potentials known
- 12.5. Mobility in soil: No harmful effects known
- 12.6. Further ecological information: No environmental problems expected, if handled and treated in accordance with standard industrial practice.

13. DISPOSAL CONSIDERATIONS

- 13.1. Material: Recycle, if possible. The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.
- 13.2. Contaminated packaging: Packaging has to be emptied entirely. Recycling of used packaging is recommended. Observe local bylaws.

14. TRANSPORT INFORMATION

- 14.1. Land transport:
- GGVS/ADR – classification: Non hazardous material
- GGVE/ RID - classification: Non hazardous material
- 14.2. Inland Waterways
- GGVBisch/ADNR – classification: Non hazardous material
- 14.3. Maritime transport
- GGV Sea/IMDG– classification: Non hazardous material

- 14.4. Air transport:
ICAO-TI/IATA – classification: Non hazardous material
- 14.5. Special precautions: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Not available.
- 14.6. Transport in bulk according to the Annex II of Marpol and the IBC code: Not available.
- 15. REGULATORY INFORMATION**
- 15.1. Classification according to EC guidelines. Danger symbol and danger text according EC No 1272/2008: The substance is not classified. No hazard symbol is necessary.
- 15.2. Labelling according 67/548/EEC or 1999/45/EC: None
- 15.3. Hazard symbols: None
- 15.4. National regulations: None
- Risk class according to VbF: Not known
- Water pollution category: Not water hazardous

16. OTHER INFORMATION

Abbreviations and Acronyms:

Abbreviation:

CAS	Chemical Abstracts Service
CLP	Regulation (EC) Nr. 1272/2008 on the classification, labeling and packaging
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
TRGS	Technical Rules on Hazard Substances
TRGS 900	Occupational Limit Values
vPvB	Very Persistent and very Bioaccumulative

This information covers the safety requirements of the product exclusively and bases on current knowledge and experience. It does not represent a guarantee for properties of the described product in terms of legal warranty regulations.