



Safety data sheet/ EG-Sicherheitsdatenblatt

Date of establishment: 03/12/02
Revision date:

Product/ Product group: Aluminium hydroxide

1.1 Substance/Preparation and Company Name

1.2 Information on the product

1.2 Information on manufacturer/Supplier

Supplier: Tiffany Glaskunst GmbH
Street: Helleforthstr. 18-20
UIP Code/town: D-33758 Schloß Holte Stukenbrock
Tel.: +49 5207 91280
Fax.: +49 5207 912840
e-mail: tgk@tgk.de
Internet: <http://www.tgk.de>

Telephone number in emergency cases: 05207-9128-0

2. Composition/Information on ingredients:

Chemical characteristics:

Aluminiumhydroxide (Hydrargillit, Gibbsit)
Formula: $Al(OH)_3$

CAS-No.	EINECS-No.
21645-51-2	244-492-7

Additional information:

None.

3. Possible hazards:

None

4. First Aid Measures:

Aluminium hydroxide is neither classified as dangerous good nor as dangerous for health. Nevertheless, we recommend to observe the general practicable precaution guidelines for handling of chemical products.

Inhalation:

Fresh air.

Eye contact:

Rinse eyes thoroughly with water. If discomfort persists due to foreign matter operation, seek medical attention.

Skin contact:

Wash with water and soap.

Ingestion:

Rinse mouth and drink plenty of water.

5. Fire fighting measures:

Appropriate extinguishing media:

Product is not combustible. Adapt media to surrounding fire conditions.

Unadequate extinguishing media for safety reasons:

Special hazards by the material or the composition, its combustion products or generated gases:

Special protection equipment for fire fighting:

6. Accidental release measures:

Personal precaution measures:

Avoid formation of dust.

Environmental protection measures:

Principally, avoid contamination of soil, water and air.

Measures for cleaning up/absorbing:

Mechanical absorption.

7. Handling and Storage:

Handling:

Information for secure handling:

Avoid formation and sedimentation of dust.

Storage:

Requirements for storage rooms and containers:

For reasons of quality, we recommend dry storage because the product can absorb humidity from the air at a low degree.

Storage class:

13 (Firm products not subject to fire hazard in packing not subject to fire hazard.)

Storage stability:

In case of appropriate storage conditions, unlimited. No chemical modification.

8. Exposure controls and personal protection:

Additional information on design of technical plants:

None.

Ingredients with limit values on working place which have to be controlled:

CAS-No.	Designation		Value	Unity
21645-51-2	Aluminium hydroxide	MAK	> 99%	6 mg/m ³ ref. to dust portion.

Respiratory protection:

Respiratory mask in case of strong formation of dust.

Hand protection:

Not necessary

Eye protection:

Protection goggles in case of strong formation of dust.

Body protection:

Not necessary.

Technical protection measures:

Avoid formation of dust by appropriate exhaustion and air filtration.

Protection and hygiene measures:

Principally, keep away from food, drinks and fodder.
Usual hygiene with reference to clothes and body.

9. Physical and chemical properties:

- **Aggregate state:** powder (fine crystalline)
- **Colour:** white
- **Odour:** odourless
- **pH-value:** 10%(in H₂O) ca. 9 (

- **Boiling point/Boiling range (in °C):** no data available
- **Meltingpoint/Melting range (in °C):** not meltable without decomposition
- **Flaming point:** the product is not combustible
- **Specific gravity at 20°C:** ca. 2,4 g/cm³
- **Solubility in water:** virtually insoluble (1,5x10⁻³ g/l)
- **Explosion danger:** the product is not explosive

10. Stability and Reactivity:

Thermic decomposition:

At temperatures above ca. 200°C in aluminium oxyde (Al₂O₃) amd water. Endothermic decomposition. Decomposes without melting.

Products to avoid:

No data available.

Dangerous decompositon products

No data available.

11. Information on toxicology:

Toxicological tests:

Acute toxicity:

Oral: LD50 > 5000 mg/kg (rat).

In eye irritating effect due to foreign matter operation.

Primary irritating effects:

No data available.

Additional toxicological information:

The product is harmless for production of packings that are used in the food sector. The commodities produced of it may, as far as the filling material is concerned, be in direct contact with dry, wet and greasing food.

Aluminium hydroxide is nearly insoluble in water and can, therefore, not be compared with possible effects of soluble aluminium compositions.

12. Information on ecology:

Information to elimination (persistence and biodegradability):

Anorganic product that is nearly insoluble in water. Can be mechanically sedimented as far as possible in treatment plants

Additional information:

Biodegradability:
Aquatic toxicity;
Fish: LC50 > 10 g/l
Daphnie: EC50 > 10 g/l

Additional information:

8 % of the lithosphe consists of aluminium. It is, therefore, after oxygen and silicon, the third element in frequency.

13. Information on waste disposal:

For the material/residues

Recommendation:

Disposal in authorised refuse pit according to valid regulations.

Waste no.:

060499 – aluminium hydroxide.

For contaminated packing:

Are subject to the packing guideline for not dangerous products. Utilise according to official recommendations in authorised treatment plants, e.g. repabag (anorganic compositions, inert, filling group 3)

14. Information on transport:

No dangerous good according to transport regulations.

15. Regulations:

Marking according to EC guideline:

The product hat not to be marked according to EC guideline/GefStoff.

Water hazard class:

Not hazardous for waters (according to VwVwS, UBA-registration, No. 5220)

16. Additional Information:

The product corresponds to the following guidelines:

- Lebensmittel- und Bedarfsgegenständegesetz (Law for food and commodities)
§§ 30 und 31
- BGVV LII
- BGVV XXXVI
- DIN EN 71 Part 3
- FDA 21 CFR Ch I, § 176.170 und § 176.180
- 90/128/EWG
- Warenwet
- CONEG

Registration status:

Europe/EC	EINECS
Switzerland:	BAGT
USA:	TSCA
Canada:	CEPA DSL
Japan:	MITI
Australia:	AICS

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.