

METALLPIGMENTE - METALLPULVER METAL PIGMENTS - METAL POWDERS

SAFETY DATA SHEET

Date: 2005-02-03 according to CD 91/155/EEC page 1 / 4

1 Identification of the substance/preparation and of the company

1.1 Identification of the substance or the preparation

BLITZ Aluminium powder Hydrostab 76xx

BLITZ Aluminium powder Stabil 76xx

xx completed indicating type (4-digit number, e.g. 7611, 7654, ...)

1.2 Use of the substance/preparation

inorganic pigment

1.3 Company identification

Benda-Lutz Werke GmbH

Franzhausen 31 Tel.: +43 (2783) 6202 – 0 A-3133 Traismauer Fax: +43 (2783) 6202 – 24

1.4 Emergency telephone numbers

Benda-Lutz Werke GmbH: +43 (2783) 6202 – 170 Austrian Poison Information Center: +43 (1) 406 43 43

2 Composition / information on ingredients

2.1 Chemical nature

Preparation, meaning chemical law (surface treated aluminium powder)

2.2 Hazardous ingredients

Content (% by weight)

Name of substance

Danger symbol / R-phrases

> 95 % Aluminium powder (coated) F / R 10, R 15

CAS No. 7429-90-5 (Aluminium)

EINECS No. 231-072-3 Index-No. 013-002-00-1

3 Hazards identification

F/R11, S7/8-16-43

The product reacts violently with alkalis, acids, chlorinated hydrocarbons and oxidising agents what leads to generation of extremely flammable hydrogen.

The product is highly flammable. Product may form an explosive dust/air mixture.

4 First-aid measures

General advice:

if inhaled: move the exposed person out of the hazardous area, fresh air, keep

breathing passages open, call a physician if irritation persists

on skin contact: wash with soap and water, take off dirty clothes, hand cream

on contact with eyes: wash affected eyes for at least 10 minutes under running water with

eyelids held open, call a physician

on ingestion: call a physician



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5 Fire-fighting measures

Suitable extinguishing media: dry sand, extinguisher class D, fire blanket

Unsuitable extinguishing media: water, carbon dioxide

Protection against fire and explosion: avoid dust clouds, keep away from sources of ignition, remove

residues, don't use vacuum cleaners

Further information: contact with water can lead to generation of hydrogen – hydrogen is

extremely flammable and explosive!

danger of dust-explosion because of dry aluminium powder

6 Accidental release measures

Keep away from sources of ignition. Carefully collect material and place it in a suitable container for disposal. Don't use vacuum cleaners. Avoid the building of dust clouds. Dispose contaminated material as waste (see point 13).

7 Handling and storage

7.1 Handling

Avoid formation of dust clouds. Keep away from sources of ignition. Use explosion proof equipment and tools. Close containers carefully after use. Equipment and furniture must not be able to load statically.

7.2 Storage

Store in a cool and dry place in non-combustible containers. Avoid direct sunlight. Store away from oxidising agents and other combustible materials.

8 Exposure controls and personal protection

8.1 Measures for exposure control

Exposure control limit 2003 for fine aluminium dust: 6 mg/m³

8.2 Personal protection

Industrial hygiene: wash with water and soap, clean dirty working clothes

Respiratory protection: cartridge filter type P 1 according to EN 149:2001 is recommended, if

Exposure control limit is exceeded

Hand protection: gloves according to EN 388 and 407 are recommended

Eye protection: tight safety goggles for handling of big quantities.

Body protection: protecting clothes for handling of big quantities

Other: skin protection cream,

avoid pure synthetic fabric to prevent the build up of static



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9 Physical and chemical properties

Form powder

Colour silver glossy or grey
Odour slightly similar to wax

pH n/a

Boiling point/boiling range aluminium: 2467 °C
Melting point/Melting range aluminium: 660 °C
Flash point aluminium: n/a

Flammability < 10 minutes (Ann. A9 CD 67/548/EEC)

Explosive properties The product is not hazardous with regard to explosions, however, it

may form an explosive dust/air mixture.

explosion limit of aluminium: lower: 30 g/m³, upper: n/d/a

Oxidizing properties n/d/a Vapour pressure n/a

Relative density 2,70 g/cm³

Bulk density $0.1 - 0.5 \text{ g/cm}^3$ (according to type)

Water solubility insoluble
Fat solubility n/d/a
Partition coefficient n/d/a

10 Stability and reactivity

10.1 Stability

No decomposition in case of use under normal conditions.

Combustible; burns to aluminiumoxide. Oxidation of aluminium if oxygen is available.

10.2 Avoiding conditions and substances

Avoid direct sunlight, dust clouds and building of sparks. Keep away from sources of ignition and open fire. The product reacts violently with alkalis, acids, chlorinated hydrocarbons and oxidising agents. Long lasting contact with water can lead to generation of hydrogen.

Contact with strong oxidising agents (e.g. peroxides) can lead to exothermic reactions (danger of fire/explosion).

10.3 Hazardous decomposition products

A reaction with the substances of point 10.2 leads to generation of extremely flammable hydrogen.

11 Toxicological information

11.1 Oral toxicity (LD 50) n/d/a
11.2 Dermal toxicity(LD 50) n/d/a
11.3 Inhalation toxicity(LD 50) n/d/a
11.4 Irritations none

12 Ecological information

Aluminium is considered as non-toxic for the environment.

A working group established by the EC is currently working on the environmental classification and labelling of substances. Part of its work are metals and their compounds with very law solubility.

Water hazard class (WGK): 0 (oneself classification because of VwVwS)



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13 Disposal considerations

Don't dispose this product as rubbish. Avoid getting into sewerage. Controlled waste disposals (after conditioning, pay attention to local regulations) and chemical/physical treatment are possible.

Dirty packaging material can be disposed as metal waste. Contact your disposal company to evaluate the contamination grade. If it is not possible to dispose it as metal waste, dispose it like the product.

14 Transport information

UN-No.: 1309

Name: aluminium powder, coated

ADR/RID: 4.1

GGVSee/IMDG-Code: 4.1, not hazardous for water

EmS: F-G, S-G (IMDG 2003), 4.1-02 (IMDG 2001)
ICAO/IATA-DGR: 4.1, Packing instructions: 415, Y15, 417

Packing group:

15 Regulatory information

Labelling according to EEC Directives:

Danger symbol:

R-phrases: R 11 Highly flammable

S-phrases: S 7/8 Keep container tightly closed and dry.

S 16 Keep away from sources of ignition – No Smoking. S 43 In case of fire use dry sand. Never use water.

Regulatory information EU-Directive 67/548/EEC to take into consideration: EU-Directive 99/45/EC

16 Other information

R 10 Flammable

R 11 Highly flammable

R 15 Contact with water liberates extremely flammable gases.

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.

Classification system: the classification corresponds to the actual EC-lists completed with information of specialised literature and raw material safety data sheets.

Exhibiting department: Quality management Replaces Safety Data Sheet of: 2004-08-31

Used short cuts: n/a - not applicable, n/d/a - no data available