

Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

1. Identification of the product and the company / undertaking

Product identifier/s

White Fused Alumina (EK and EK micro), Pink Fused Alumina (EKR), Brown Fused Alumina (NK and NK micro)

Uses of the product

Mineral blasting abrasive for industrial use

2. Hazards identification

Classification

Not applicable

Label elements

Does not require labelling under the CLP Regulation (EC) No. 1272/2008. But please take note of this product information. No risk of silicosis during application.

Safetey insturctions

Possible dust exposure due to fine dust particles.

Other hazards

Not known

3. Composition/information on ingredients

Ingredients	NK (Mean values)	NK micro (Mean Values)	EK (Mean values)	EK mikro (Mean values)	EKR (Mean values)
Alumina (Al ₂ O ₃)	95.65%	95.77%	99.73%	99.69%	99.30%
Titanium dioxide (TiO ₂)	2.42%	2.79%	-/-	-/-	-/-





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling

Telefon: (08092) 64 91 64 92 (08092)

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Chemical characterisation	EINECS	CAS No.	· · ·	REACH-Registration No. CLP-Notification No.	Classification according to CLP Regulation (EC) No. 1272/2008	
Alumina (Al ₂ O ₃)	215-691-6	1344-28-1	(1)	01-2119529248-35-0010	Hazard classes /	Hazard
			(2)	02-2119709295-38-0000	hazard categories	statements
Titanium dioxide (TiO2)	236-675-5	13463-67-7	(2) (02-2119879066-28-000	-/-	-/-
					-/-	-/-

Substances listed on the so-called "Candidate List of Substances of Very High Concern (SVHC) for authorization" of the European Chemicals Agency (ECHA) are not intentional ingredients of this product. It is therefore not to be expected that those substances are present in quantities of > 0.1% in the product.

Hazardous substances

No dangerous ingredients

Substances with prescribed EC exposure limits

Does not contain substances with EC exposure limits

4. First aid measures

Please also take note of sections 8 and 16 of this product information.

Description of first aid measures

General information

Consult a doctor in case of health disorders.

After inhalation

Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.

After eye contact

Remove contact lenses and rinse the eyes with open eyelids for 10 minutes under running water. If necessary, consult an ophthalmologist.

After skin contact

Wash with water and rinse.

After swallowing

Rinse mouth and drink plenty of water. Do not include vomiting. If you feel unwell, seek medical advice.





Ing. Büro Industrievertretungen GmbH
Am Ölfeld 5
85617 Aßling

Telefon: (08092) 64 91 (08092) 64 92 Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Most important symptoms and effects, both acute and delayedNot known

Indication of any immediate medical attention and special treatment needed Treat symptomatically

5. Firefighting measures

Extinguishing media

Suitable extinguishing media

Product does not burn. Match extinguishing measures to ambient situation.

Unsuitable extinguishing media

Not known

Special hazards arising from the product

Not known

Advice for fire fighters

Match the firefighting measures to the environmental conditions.

Additional Information

Not known

6. Accidental release measures

Personal precautions

Avoid dust formation

Environmental protection measures

Not known

Methods and materials for containment and cleaning up

Pick up mechanically and dispose of properly.





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

 $E-Mail: of fice@hafra-sandstrahltechnik.de \ / \ Internet: www.hafra-sandstrahltechnik.de$

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Reference to other sections

Refer to protective measures in sections 7 and 8.

Additional Information

Not known

7. Handling and storage

Precautions and safe handling

Information on safe handling

Avoid dust formation

Information on fire and explosion protection

No special fire protection measures are necessary

Additional Information

Not known

Conditions for safe storage, including any incompatibilities

Information on storage conditions

Always store product in dry conditions

Requirements for storage rooms and containers

No special requirements needed.

Storage class VCI

LGK 13 (non-combustible solids)

Specific end uses

Alumina is used to manufacture or to use as blasting or abrasive medium.





Ing. Büro Industrievertretungen GmbH
Am Ölfeld 5
85617 Aßling

Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

8. Limitation and monitoring of exposure/personal protective equipment

Control parameters

Occupational exposure limit values in the workplace and/or biological limit values

Occupational Exposure Limits (OEL) in Germany for dusts

Inhalable fraction (E) 10mg/m³
Resprirable fraction (A) 1,25mg/m³
With exceeding factor 2 each, ref. TRGS 900

Community exposure limits

Country specific. Please inquire in individual cases.

Limitation and monitoring of exposure

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction.

Alumina is not a hazardous substance, thus only the general dust limit value applies.

Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for Hazardous Substances (TRGS) 4021 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".

Personal protective equipment

The use of personal protective equipment is dependent on the concentrations and quantity of hazardous substances in their execution in specific workplaces.

Respiratory protection

Normally, no personal respiratory protective equipment is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).

Hand protection

Glove material: Leather





Ing. Büro Industrievertretungen GmbH
Am Ölfeld 5
85617 Aßling

Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: of fice@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Eye protection

Tight-sealing protective eyewear (dust-protection goggles) in accordance with EN 166:2001.

Body protection

With normal use, no body protection by half or full-body coverall and boots is required.

Information on industrial hygiene

Minimum standards for protective measures when handling working materials are listed in TRGS 500. Do not eat, drink, smoke or take drugs while using this product.

Avoid contact with skin, eyes and clothing.

Remove soiled or soaked clothing immediately.

Wash hands before breaks and at end of work.

Protect skin by using skin creams.

Environmental protection measures

See sections 6 and 7; no further action is required.

9. Physical and chemical characteristics

Information on basic physical and chemical properties

Appearance

Appearance angular Physical state solid

Color white / pink / brown

Odor odorless

Safety data

Explosion hazard

The product itself is not explosive; however, formation of explosive air/dust mixtures is possible

Lower explosion limit not known
Upper explosion limit not known
Vapor pressure not relevant

Specific gravity approx. 3.9 to 4.1 g/cm³

Flow time not relevant
Water solubility insoluble in water
pH value not applicable





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling

Telefon: (08092) 64 91 (08092)64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Alumina Product Name:

Provider: Hasenfratz GmbH Revised: 17.11.2015

Boiling point/range not applicable

Flash point not determined as product is not flammable

Melting point approx. 2.000°C

Ignition temperature not determined as product is not flammable

The information about the explosion limits refers to Alumina. Please refer to the technical data sheet for other physical and chemical data.

Other information

None

10. **Stability and reactivity**

Reactivity

Alumina is non-reactive and does not change with proper handling and storage.

Chemical stability

Alumina is chemically stable and does not change with proper handling and storage.

Possibility of hazardous reactions

No hazardous reactions known.

Conditions to avoid

No decomposition if used according to specifications.

Incompatible materials

No hazardous reactions known.

Hazardous decomposition products

No known hazardous decomposition products

11. **Toxicological information**

Information on toxicological effects

According to current IFA reports the product contains no silicosis-including, toxic and carcinogenic components. The indications given in section 8 of this product information must be observed.

Acute toxicity

No data on the product available





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Irritation

No data on the product available

Corrosivity

No data on the product available

Sensitization

No data on the product available

Repeated dose toxicity

No known toxicity of Alumina.

CMR effects (carcinogenic, mutagenic and toxic to reproduction)

No carcinogenic effect according to IFA reports.

Summarized evaluation of the CMR properties

No known CMR properties

Practical experience (relevant for classification and other observations)

No data on the product available

Carcinogenicity

No known carcinogenicity of Alumina.

Mutagenicity

No data on the product available

Reproductive toxicity

No data on the product available

Other Information

Not Known

12. <u>Environmental information</u>

Toxicity

No known effects





Ing. Büro Industrievertretungen GmbH
Am Ölfeld 5
85617 Aßling

Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Ecotoxicity

For Alumina no environmental problems are to be expected when handled and used properly.

Fish toxicity

Harmful effects for aquatic organism are not expected.

Aquatic invertebrates

Harmful effects for aquatic organism are not expected.

Water plants

Harmful effects for aquatic organism are not expected.

Persistence and degradability

Based on current experience, this product is inert and not degradable.

Bioaccumulation potential

No data available. Accumulation in biological materials is rather unlikely, as it is inert and insoluble.

Mobility in soil

Potential not known

Results of PBT and vPvB assessment

Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

Other harmful effects

Not known

13. <u>Disposal considerations</u>

Waste treatment methods

Product

Alumina. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with the disposer.

Waste Code according to European Waste Catalogue (EWC)

12 01 17 waste blasting material other than those mentioned in 12 01 16





Ing. Büro Industrievertretungen GmbH
Am Ölfeld 5
85617 Aßling

Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: of fice@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Recommendation

Contact "Hasenfratz Sandstrahltechnik" for the recycling of used Alumina.

Packaging

National and local regulations must be followed.

Contaminated packaging

Packaging with Alumina residues can be recycled.

Cleaned packaging

Packaging can be reused after being cleaned or recycled

14. Transport Information

Alumina is no dangerous good.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the product

EU regulations

Not known

National regulations

Water hazard class

Not hazardous to water; classification according to VwVwS, Annex 4.

Technical instruction on air quality (TA-Luft)

Substances not mentioned by name.

Hazardous Incident Ordinance (12. BlmSchV [German Federal Immission Control Regulation])

Substances not mentioned by name.

Solvents Ordinance (31. BlmSchV [German Federal Immission Control Regulation])

Substances not mentioned by name.





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: of fice@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Chemicals Prohibition Ordinance

Substances not mentioned by name.

Relevant Technical Rules for Hazardous Substances

Contains no hazardous substances.

Employment Restrictions

Not known

Miscellaneous

Alumina is not subject to the VOC Regulation.

International regulations

All Alumina ingredients are listed with TSCA, AICS, DSL (NDSL), NEPA and PICCS and registered with MITI / ENCS under 1-23.

Chemical safety assessment

Not relevant

16. Other Information

Further applicable EC directives

Not known

Restrictions on use recommended by the manufacturer

For industrial application only.

Other Information

The product information in this documentation is correct to the best of our knowledge at the time of printing. The information is intended to provide you with advice on the safe handling of the product mentioned in this product information for storage, processing, transport and disposal. The information cannot be applied to other products. If the product mentioned in this documentation is in any way tampered with i.e. mixed with other materials, processed or undergoes processing, the information as supplied in this document no longer applies to the new product unless expressly stated otherwise.

Changes since the last version





Ing. Büro Industrievertretungen GmbH Am Ölfeld 5 85617 Aßling Telefon: (08092) 64 91 (08092) 64 92

Telefax: (08092) 3 14 32

E-Mail: office@hafra-sandstrahltechnik.de / Internet: www.hafra-sandstrahltechnik.de

Voluntary product information for blasting abrasives based on the format of the safety data sheet of the REACH Regulation (EC) 1907/2006

Product Name: Alumina

Provider: Hasenfratz GmbH Revised: 17.11.2015

Literature and data sources

Regulations

REACH Regulation (EC) No. 1907/2006 CLP Regulation (EC) No. 1272/2008 Hazardous Substances Ordinance (GefStoffV) Commission Decision 2000/532/EC (AVV) Transport Regulations according to ADR, RID and IATA TRGS 900 VOC Regulation (ChemVOCFarbV)

Hazard statements, referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008:

None

The above information is based on the present state of knowledge; however, this shall not constitute a guarantee of product properties and establishes no contractual legal rights. Existing laws and regulations must be strictly followed by the recipient or user of the blasting medium on their own responsibility.

