

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

1. Identification of the substance /preparation and company/ undertaking

- 1.1. **Name of the substance or preparation:** Abrasive material for TBi JetStream
Art. No.: 392P000002
- Registration number: (ECHA) 01-2119529248-35-xxxx
- 1.2. **Use of the substance or preparation:** Abrasive Material for abrasive cleaning (surface or punctual)
- 1.3. **Identification of company or firm:**
Name or commercial/ Supplier name: TBi Industries GmbH.
Place of business or office: Ruhberg 14
D-35463 Fernwald-Steinbach
Telephone: +49 6404 9171-0
Fax: +49 6404 9171-58
E - mail: info@tbi-industries.com
Contact for technical information: As above
- 1.4. **Emergency Telephone:** +49 6404 9171-0 (This number is only available during the office hours)

Section 2: Hazard identification

- 2.1 Classification of the substance
Classification according to EC Regulation 1272/2008 (CLP):
The mixture does not meet the classification criteria, it does not contain hazardous ingredients at a concentration higher than their limit, does not contain PBT / vPvB substances or substances with occupational exposure limits The Safety Data Sheet does not need to be processed and provided, even on request, in accordance with Article 34 of Regulation (EC) No. 1907/2006. The supplier is providing a safety data sheet with the intention of assuring the purchaser that these products are not classified as dangerous according to Regulation (EC) No 1272/2008 and do not meet the conditions for the issue of safety data sheets upon request.
- 2.2 Label elements
Substance
Substance name: WHITE CORUNDUM / BROWN CORUNDUM / ALUMINA
Symbol: None.
H-phrases: None.
P-phrases: None.
Additional information: None.
- 2.3 Other hazards that affect the classification
Contact with skin and exes may cause mild irritation. Inhalation of high dust concentrations can cause irritation of the respiratory system.

Section 3: Composition / Information on ingredients

3.1 Substances

Name of the ingredient	Content (%)	CAS	EINECS	Index no.	Classification
Aluminium oxide	85 – 99,9	1344-28-1	215-691-6	-	-

The full text of the R/H-phrases in section 16.

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Section 4: First aid

4.1 Description of first aid measures

General information:

Inhalation:

Bring the affected person to fresh air. There is necessary to clean mechanically and to wash with soap in case of nasal irritation. If coughing after inhaling dust take from the narrow-leaved buckthorn or hot milk with soda. Consult the doctor if necessary.

Skin contact:

Wash sufficiently with water and apply grease cream or Vaseline.

Eye contact:

Rinse open eyes immediately with copious amounts of water. Rinse at least for 15 minutes. Contact ophthalmologist if necessary.

Ingestion:

Not applicable. Perform gastric lavage under qualified medical guidance, drink plenty of water and administer activated charcoal, laxative.

4.2 The most important acute and delayed symptoms and effects.

Sensitive individuals may irritate eyes, skin and mucous membranes.

4.3 Indication of immediate medical attention and special treatment

Not available.

Section 5: Fire – fighting measures

5.1 Extinguishing

Extinguishing media:

Adapt selecting of extinguishing media to the environment and burning material.

Unsuitable extinguishing media:

High volume water jet – can spread fire.

5.2 Special hazards arising from the mixture.

Not available. The product is not combustible, flammable or explosive.

5.3 Advice for firefighters

Wear protective clothing and breathing apparatus.

Section 6: Measures Accidental Release

6.1 Personal precautions, protective equipment and emergency procedures.

Provide adequate ventilation. Use personal protective equipment (see section 8).

6.2 Measures for environmental protection.

Prevent leakage into the soil, sewage treatment plants, drainage systems and water pipes.

6.3 Methods and materials for containment and cleaning.

Sweep spilled grain and collect into a suitable container – depending on the extent of pollution to consider the possibility of further use.

6.4 Reference to other sections

Section 8 and 13

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Section 7: Handling and storage

7.1 Precautions for safe handling

Ensure local exhaust ventilation of production space and adequate ventilation, don't inhale the dust. Ensure adequate ventilation in areas with intense dust – local suction vacuum unit; thoroughly seal the device. It is necessary to use methods of „wet „cleaning and washing equipment surfaces, floors and ceilings with water. After washing, drain water into the industrial sewerage system in accordance with relevant guidelines. Wash yourself thoroughly after handling the product. Don't eat, drink or smoke. Material is not dangerous. It can be transported in accordance with the regulations for the type of transport.

7.2 Conditions for safe storage, including any incompatible mixtures

Store in a dry, well-ventilated room, in properly labelled containers separated from other granular materials. Don't store together with acids, alkalis and organic substances.

7.3 Specific end / specific end use

See section 1.2

Section 8: Exposure controls / personal protection

8.1 Control parameters:

Exposure limits:

Government Decree no. 361/2007 Coll., Laying down the conditions of health protection at work, as amended, there are set following maximum allowable concentrations (NPK-P) a permissible exposure limits (PEL) chemical substances in the working environment:

Substance	CAS	PEL (mg/m ³)	NPK-P (mg/m ³)	note
Powder with mostly non-specific effects		10		For aluminium and its oxides excluding gamma-alumina

DNEL: No data available.

PNEC: No data available.

8.2 Exposure:

Technical measurements:

Ensure adequate local exhausting of working site. Use local exhaust ventilation during processing and provide other technical controls to ensure the level of pollution of the working environment under recommended exposure limits. The working place must be equipped with a sink or shower for casual necessity of eyewash.

Individual protection measures:

Respiratory:

Respirator to avoid solids – we recommend Lepestok F-62, or U-2K – according to EN 149.

Hands:

Protective gloves – according to EN 374.

Eyes:

Safety goggles EN 166.

Skin:

Work clothes (ČSN ISO 13688) and shoes (ČSN ISO 20347).

Thermal hazards:

None.

Environmental exposure

None.

controls:

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Solid.
Colour:	White / Brown.
Odour:	Odourless.
pH:	No data available.
Melting / freezing point (°C):	2044-2050
Self-ignition temperature (°C):	No data available.
Decomposition temperature (°C):	No data available.
Initial boiling point / boiling range (°C):	3530
Flash Point (°C):	Not relevant.
Flashpoint (°C):	No data available.
Evaporation rate:	No data available.
Flammability:	No data available.
Limits (Upper / Lower) flammability / explosion:	No data available.
Vapour pressure (20°C):	No data available.
Vapour density:	No data available.
Relative density (20°C):	3,99 g/cm ³
Solubility in water (20°C):	Insoluble.
Partition coefficient:	No data available.
N-octanol/water:	
Viscosity (20°C):	No data available.
Explosive properties:	None.
Oxidation properties:	None.

9.2 Other information:

VOC content (%):	No data available.
Solids:	No data available.
Bulk density:	1,65 - 1,93 g/cm ³

Section 10: Stability and reactivity

10.1 Reactivity	No data available.
10.2 Chemical stability	Stable under normal temperature conditions.
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to avoid	Avoid contact with acids and alkalis.
10.5 Incompatible materials	Avoid contact with acids and alkalis.
10.6 Hazardous decomposition products	They are not known.

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Section 11: Toxicological information

11.1 Information on toxicological effects

Substance

Acute toxicity:

Component	LC50 inhalation, rat	LD50 oral, rat	LD50 dermal, rabbit
Alumina	-	> 3600 mg/kg	> 5000 mg/kg

Irritation:

Irritant effect on the eye, skin and respiratory tract due to the mechanical action of fine dust particles.

Corrosivity:

Irritant effect on the eye, skin and respiratory tract due to the mechanical action of fine dust particles.

Sensitization:

Was detected.

Repeated dose toxicity:

No data available.

Carcinogenicity:

Is not classified as carcinogenic.

Was not detected in humans. Based on the information IARC (International Agency for Research on Cancer) were shown some carcinogenic effects when exposure in the industrial production of aluminium. Carcinogenic effects were demonstrated by testing on animals. Dose 90 mg/kg by intra peritoneal administration in rat caused tumour of the lung, larynx and thorax. Dose 200 mg/kg implanted locally in rat caused tumours and changes in the application site.

The median cumulative effect.

Mutagenicity:

No data available.

Reproductive

toxicity:

No data available.

Other hazards:

Long term of continuous exposure can cause chronic catarrh of mucous membranes of the upper respiratory tract. Chronic inhalation during 8-9 years can lead to fibrosis of the lungs, called aluminosis. Skin contact can cause eczema and dermatitis. There are also possibilities of itching feet, shins, hands and forearms, often accompanied by hyperhidrosis, skin sensitivity disorders, and impotence. Dermal absorption of essential substances (Al₂O₃) has not been proven yet, while sensitization has been detected already. Prolonged exposure of the dust from the product may cause eye pain, tissue damage, and conjunctival hyperaemia. Absorption from gastrointestinal tract is rather lighter, which may be explained by the ability of aluminium to form insoluble salts in the intestine with phosphorous.

Section 12: Ecological information

12.1 Toxicity

There are no known significant effects and risks.

Component	LC50, 96 hrs. Rainbow trout	EC50, 48hrs.Daphnia magna	EC50, 72hrs. Cilia
Not fixed	-	-	-

12.2 Persistence and degradability

Chemically inert and insoluble in water.
Separation mechanically (sedimentation, filtration, etc.)

12.3 Bio accumulative potential

It doesn't accumulate in the organism.

12.4 Mobility in soil

Immobile, insoluble.

12.5 Results of PBT and vPvB

Does not contain any substances that are evaluated as PBT and vPvB.

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

12.6 Other adverse effects

No data available.

Upon contact with the surface water turbidity occurs, changing organoleptic properties of water (about the smell) as well as harmful effects on aquatic plants.

Section 13: Disposal

13.1 Waste treatment methods

Cat. No. Mixture of waste:	16 03 04	Inorganic wastes other than those mentioned in 16 03 on the 3rd.
Cat. No. Packaging polluted mixtures:	15 01 01	Paper and cardboard containers.
	15 01 02	Plastic packaging.
	15 01 09	Textile cover (big-bag).

Recommended procedure for disposal waste mixture:

Unusable material for recycling, respectively to eliminate landfilling.

Recommended procedure for disposal of waste packaging polluted

Packaging is not subject of recollection. Forward the authorized entity for disposal.

Specific measures in waste management.

None.

Section 14: Transport information

14.1 UN

This product is not a dangerous thing in terms of transport.

14.2 NU proper shipping name

-

14.3 Class / Transport hazard class

-

14.4 Packing group

-

14.5 Environmental hazards

-

14.6 Special precautions for user

-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code.

-

Section 15: Regulatory information

15.1 Regulations relating to the safety, health and environmental regulations / legislation specific for the substance or mixture

All as amended and including implementing legislation

Act no. 350/2011 Coll. on chemicals...

Act. no. 258/2000 Coll. The protection of public health...

Act. no. 185/2001 Coll. Waste...

Act. no. 201/2012 Coll. Clean air...

Act no. 254/2001 Col. on waters

Act no. 477/2001 Coll. Packaging...

Act no. 111/1994 Coll. The road transport

Act. no. 224/2015 Sb. A major accident prevention...

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Regulation 361/2007 Coll. Conditions of health protection at work...

Decree no. 432/2003 Coll., laying down the conditions for the categorization of works...

Regulation (ES) no. 1272/2008 (CLP) on classification, labelling and packaging of substances and mixtures...

Regulation EC 1907/2007 (REACH) Registration, Evaluation, Authorisation and Restriction of Chemicals

15.2 Chemical safety assessment

It was not done.

Section 16: Further information:

The complete text of all R/H- phrases listed on section 3:

R- None.

phrases: None.

H- PEL Permissible Exposure Limit

phrases:

Abbreviations:

NPK-P Maximum concentrations at workplace

PBT Persistent, bio accumulative, toxic

vPvB Very persistent and very bio cumulative

VOC Organic volatile compounds

CAS Chemical Abstracts Substances

EINECS European Commission number

DNEL Derived no effect level

PNEC Predicted no- effect concentration

LD50 Lethal dose for 50%

LC50 Lethal concentration for 50%

EC50 Effect concentration for 50%

NOAEL No observable adverse effect load

ADR European Agreement on the International Carriage of Dangerous Goods by Road

RID the Code for the International Carriage of Dangerous Goods by Rail

IMDG International Code for the Carriage of Dangerous Goods by Sea

ICAO Technical instructions for the safe transport of dangerous goods by air

IATA International airline association

SAFETY DATA SHEET

According to regulation (EC) No. 1907/2006 (REACH)

Product name: Abrasive material for TBi JetStream

TBi Industries GmbH

Date of issue: 01.01.2003

page 1 of 8

Date of revision No. 1.5: 10.01.2020

Print date: 10.1.2020

Changes to the previous version MSDS: a formal amendment to the MSDS in accordance with Commission

Regulation (EU) No.2015 / 830

This revision follows the revision no. 3.0 from 15th November 2016 and is in compliance with Regulation (EC)

No 1272/2008 (CLP).

There has been used materials as following for the revision of this Material Safety Data Sheet:

Material Safety Data Sheet corresponds to EC Regulation EC 1907/2006 (REACH).

Web portal of Czech Ministry of Industry and Business

ESIS: European chemical Substances Information System

Toxicological databases

The classification was performed by the calculation method.

Instruction for training:

Workers who come into contact with dangerous substances, they must be familiar with the effects of these substances within the required range, how to handle them and with protective measures.

They must be familiar with the basics of first aid, sanitation procedures and procedures for disaster and accident management.

They must be familiar with the safety rules and data stated in the MSDS.

If the chemical or mixture is classified as corrosive or toxic, workers must be familiar with the rules for handling a caustic / toxic chemical or a mixture.

Persons transporting dangerous substances must be familiar with the ADR / RID accident guidelines.

The information provided on this MSDS is believed to be correct and correspond to the best knowledge of the supplier and the information could be used as a guidelines for the training of those who handle the product. Manufacturer carries a guarantee for the above described properties of the product when used according to specifications. User is responsible for determination suitability of the product for a specific purpose and adapting security measures if such application is contrary to the manufacturer's recommendations.