

Safety data sheet

Page: 1/13

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

Product: **KBS® Coating Brushable**

(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

KBS® Coating Brushable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Flame retardant.

1.3. Details of the supplier of the safety data sheet

Company:

Wolman Wood and Fire Protection GmbH

Dr.-Wolman-Str. 31-33

76547 Sinzheim, Germany

Telephone: +49 7221 800-0

1.4. Emergency telephone number

International emergency number:

Telephone: +1-813-248-0585

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

2.2. Label elements

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

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(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

According to Regulation (EC) No 1272/2008 [CLP]

The product does not require a hazard warning label in accordance with GHS criteria.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Dispersion based on: Aluminium hydroxide, Water

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

Tris(2-chloro-1-methylethyl) phosphate

Content (W/W): $\geq 3\%$ - $< 5\%$

CAS Number: 13674-84-5

EC-Number: 237-158-7

REACH registration number: 01-2119486772-26

Acute Tox. 4 (oral)

H302

| Boron zinc hydroxide oxide (B₁₂Zn₄(OH)₁₄O₁₅)

Content (W/W): $\geq 1\%$ - $< 2.5\%$

CAS Number: 138265-88-0

Repr. 2 (unborn child)

Aquatic Acute 1

Aquatic Chronic 2

H361d, H411, H400

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink plenty of water.

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

Symptoms: No significant symptoms are expected due to the non-classification of the product.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

Not applicable

Unsuitable extinguishing media for safety reasons:

not applicable

Additional information:

Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

5.2. Special hazards arising from the substance or mixture

Product is not combustible or explosive. No particular hazards known.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.
Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For large amounts: Dike spillage. Pump off product.

For residues: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

The product is neither self-ignitable, nor an explosion hazard, nor does it promote fires. No special precautions necessary.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from foodstuffs.

Suitable materials for containers: Polypropylene (PP), High density polyethylene (HDPE)

Further information on storage conditions: Keep only in the original container. Store protected against freezing.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

Product: **KBS® Coating Brushable**

(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

1344-28-1: Aluminium oxide
21645-51-2: Aluminium hydroxide
65997-17-3: Glass, oxide, chemicals
138265-88-0: Boron zinc hydroxide oxide (B₁₂Zn₄(OH)₁₄O₁₅)
9004-34-6: Cellulose

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	dispersion, liquid
Colour:	whitish
Odour:	slight odour
Odour threshold:	No data available.
pH value:	7 - 8 (20 °C)
Freezing point:	not applicable
Boiling point:	approx. 100 °C
Flash point:	Aqueous preparation

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.
Date / Revised: 21.04.2016

Version: 4.0

Product: **KBS® Coating Brushable**

(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Flammability:	Based on the structure or composition there is no indication of flammability
Lower explosion limit:	For liquids not relevant for classification and labelling.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Ignition temperature:	Based on the water content the product does not ignite.
Vapour pressure:	approx. 23 hPa (20 °C) The product has not been tested. The statement has been derived from the properties of the individual components.
Density:	1.4 - 1.5 g/cm ³ (20 °C)
Relative vapour density (air):	No data available.
Solubility in water:	miscible (20 °C)
Partitioning coefficient n-octanol/water (log K _{ow}):	not applicable for mixtures
Self ignition:	Based on its structural properties the product is not classified as self-igniting.
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	approx. 50,000 mPa.s (20 °C)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.

9.2. Other information

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section., No further information available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No data available.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

10.4. Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

None known during use and storage if used according to instructions.

10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products known.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion.

Information on: Aluminium hydroxide

Experimental/calculated data:

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

Information on: Tris(2-chloro-1-methylethyl) phosphate

Experimental/calculated data:

LD50 rat (oral): 630 mg/kg (Guideline 92/69/EEC, B.1)

Irritation

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

Product: **KBS® Coating Brushable**

(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

Assessment of irritating effects:

Based on available Data, the classification criteria are not met.

| *Information on: Boron zinc hydroxide oxide (B₁₂Zn₄(OH)₁₄O₁₅)*

| *Assessment of irritating effects:*

| *Not irritating to the eyes.*

| *Information on: Tris(2-chloro-1-methylethyl) phosphate*

| *Assessment of irritating effects:*

| *Not irritating to the skin. Not irritating to the eyes.*

Respiratory/Skin sensitization

Assessment of sensitization:

Based on available Data, the classification criteria are not met.

Information on: Aluminium hydroxide

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Information on: Tris(2-chloro-1-methylethyl) phosphate

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Germ cell mutagenicity

Information on: Aluminium hydroxide

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

The substance was not mutagenic in mammalian cell culture.

Information on: Tris(2-chloro-1-methylethyl) phosphate

Assessment of mutagenicity:

In the majority of studies performed with microorganisms and in mammalian cell culture, a mutagenic effect was not found. A mutagenic effect was also not observed in in vivo tests.

Carcinogenicity

Assessment of carcinogenicity:

No data available.

Reproductive toxicity

Assessment of reproduction toxicity:

No data available.

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

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(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

Specific target organ toxicity (single exposure)

Remarks: No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Information on: Aluminium hydroxide

Assessment of repeated dose toxicity:

The substance may cause damage to the lung after repeated inhalation of high doses. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: Tris(2-chloro-1-methylethyl) phosphate

Assessment of repeated dose toxicity:

Prolonged and repeated exposure may cause effects on the liver.

Aspiration hazard

No data available.

Other relevant toxicity information

| The product has not been tested. The statement has been derived from the properties of the individual components.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Based on available Data, the classification criteria are not met.

| *Information on: Boron zinc hydroxide oxide (B12Zn4(OH)14O15)*

Assessment of aquatic toxicity:

| *Very toxic (acute effect) to aquatic organisms.*

| *Information on: Tris(2-chloro-1-methylethyl) phosphate*

Assessment of aquatic toxicity:

| *Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.*

12.2. Persistence and degradability

| *Information on: Boron zinc hydroxide oxide (B12Zn4(OH)14O15)*

Assessment biodegradation and elimination (H2O):

| *Inorganic product which cannot be eliminated from water by biological purification processes.*

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 21.04.2016

Version: 4.0

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(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

Information on: Tris(2-chloro-1-methylethyl) phosphate

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria). Moderately/partially eliminated from water.

12.3. Bioaccumulative potential

Information on: Tris(2-chloro-1-methylethyl) phosphate

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

12.6. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7. Additional information

Other ecotoxicological advice:

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Untamminated packaging can be re-used.

SECTION 14: Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable

Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.
Date / Revised: 21.04.2016

Version: 4.0

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(ID no. 30531983/SDS_GEN_EU/EN)

Date of print 20.04.2021

Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

14.1. UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Repr.	Reproductive toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.