

BrazeTec d 21 Pulver

Version 1.5

SDS Number: 300000000954

Revision Date: 04/06/2018

SECTION 1. IDENTIFICATION

Product name : BrazeTec d 21 Pulver

Product code : 300000000954

Manufacturer or supplier's details

Company name of supplier : SAXONIA Technical Materials GmbH

Address : SAXONIA Technical Materials GmbH
Rodenbacher Chaussee 4
63457 Hanau
Germany

E-mail address of person responsible for the SDS : info.ipds@umicore.com

Poison Center

Telephone : 1 800 222 1222

Hours of operation : 24HRS

SupplierEmergency telephone number : For transport in Europe, Central- and South America, Israel and Africa (Non-Arabic speaking countries):+32 3 213 15 70
For transport in the Middle East (Israel excluded) & Arabic speaking Africa:+32 3 213 33 79
For transport in the USA and Canada:1-877 986 4267
For transport in Asian and the Pacific (China excluded):+65 62 64 78 36
For transport in China:(+86) 400 88 71 190
Hours of operation : This telephone number is available 24 hours per day, 7 days per week.**Recommended use of the chemical and restrictions on use**

Recommended use : brazing

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Reproductive toxicity : Category 2

GHS label elements

Hazard pictograms :



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Signal word : Warning

Hazard statements : H361d Suspected of damaging the unborn child.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 75 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 75 %

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
potassium metaborate	13709-94-9	<= 50
boron potassium oxide(b4k2o7), tetrahydrate	12045-78-2	<= 50

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
Consult a physician after significant exposure.
If unconscious, place in recovery position and get medical attention immediately.

In case of skin contact : If on clothes, remove clothes.

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|---|---|---|
| In case of eye contact | : | Remove contact lenses.
Flush eyes with water as a precaution.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist. |
| If swallowed | : | Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital. |
| Most important symptoms and effects, both acute and delayed | : | Inhalation may provoke the following symptoms:
Shortness of breath
Asthma |

SECTION 5. FIREFIGHTING MEASURES

- | | | |
|---|---|---|
| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : | High volume water jet |
| Hazardous combustion products | : | Fluorine compounds
Boron oxides |
| Further information | : | Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
Ensure adequate ventilation. |
| Environmental precautions | : | Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

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- Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapours/dust.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
To maintain product quality, do not store in heat or direct sunlight.
- Further information on storage stability : Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
potassium metaborate	13709-94-9	TWA (Inhalable fraction)	2 mg/m ³ (Borate)	ACGIH
		STEL (Inhalable fraction)	6 mg/m ³ (Borate)	ACGIH

Hazardous components without workplace control parameters

Components	CAS-No.
boron potassium oxide(b ₄ k ₂ o ₇), tetrahydrate	12045-78-2

- Engineering measures** : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

- Hand protection
- Material : Nitrile rubber
- Break through time : > 240 min

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Glove thickness	: 0.38 mm
Eye protection	: Safety glasses with side-shields conforming to EN166
Skin and body protection	: Dust impervious protective suit
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: powder
Colour	: white
Odour	: odourless
pH	: Not applicable
Melting point/range	: 400 - 750 °C
Boiling point/boiling range	: not determined
Flash point	: Method: closed cup does not flash
Flammability (solid, gas)	: The product is not flammable.
Density	: 1.5 g/cm ³
Solubility(ies) Water solubility	: soluble

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: None known.
Incompatible materials	: Strong acids
Hazardous decomposition products	: Stable under normal conditions.

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Remarks: No data available

Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Remarks: No data available

Acute toxicity estimate: 6.48 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Calculation method

Acute dermal toxicity : Remarks: No data available

Components:**potassium metaborate:**

Acute oral toxicity : Assessment: No data available

Acute inhalation toxicity : Assessment: No data available

Acute dermal toxicity : Assessment: No data available

boron potassium oxide(b4k2o7), tetrahydrate:

Acute oral toxicity : Assessment: No data available

Acute inhalation toxicity :

Remarks: No data available

Acute dermal toxicity :

Remarks: No data available

Skin corrosion/irritation**Product:**

Remarks: No data available

Serious eye damage/eye irritation**Product:**

Remarks: No data available

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Respiratory or skin sensitisation**Product:**

Remarks: No data available

Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity**Product:**

Remarks: No data available

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity**Product:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:**boron potassium oxide(b4k2o7), tetrahydrate:**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

STOT - single exposure**Product:**

Remarks: No data available

STOT - repeated exposure**Product:**

Remarks: No data available

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Repeated dose toxicity**Product:**

Remarks: No data available

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:****Components:****potassium metaborate:****Ecotoxicology Assessment**

Acute aquatic toxicity : No data available

boron potassium oxide(b4k2o7), tetrahydrate:**Ecotoxicology Assessment**

Acute aquatic toxicity : No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with the European Directives on waste and hazardous waste.
In accordance with local and national regulations.
Do not contaminate ponds, waterways or ditches with chemical or used container.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR - DOT**

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Reproductive toxicity

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

potassium metaborate	13709-94-9
Potassium tetrafluoroborate	14075-53-7
boron potassium oxide(b4k2o7), tetrahydrate	12045-78-2

The components of this product are reported in the following inventories:

CH INV	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory

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IECSC : On the inventory, or in compliance with the inventory

TCSI : On the inventory, or in compliance with the inventory

TSCA : Not On TSCA Inventory

TSCA list

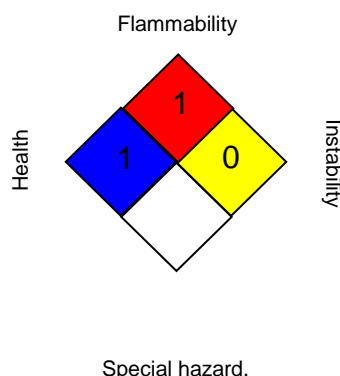
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HEALTH	*	1
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA : 8-hour, time-weighted average

ACGIH / STEL : Short-term exposure limit

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population;

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LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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