

BrazeTec t

Version 2.11

DE

SDS Number: 300000001042

Revision Date: 20.07.2018

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

Product identifier : BrazeTec t

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

Use of the Sub-
stance/Mixture : brazing

1.3 Details of the supplier of the safety data sheet

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

E-mail address of person
responsible for the SDS : sdb@saxonia-tm.de

1.4 Emergency telephone number

Poison Center

Telephone : +49 30 192 40

Hours of operation : 24HRS

Supplier : Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Reproductive toxicity, Category 1B H360FD: May damage fertility. May damage the

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unborn child.

Specific target organ toxicity - single exposure, Category 3, Respiratory system

H335: May cause respiratory irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

H335 May cause respiratory irritation.
H360FD May damage fertility. May damage the unborn child.

Precautionary statements

:

Prevention:

P201 Obtain special instructions before use.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:

boric acid
phosphoric acid, trisodium salt, dodecahydrate

Additional Labelling

Restricted to professional users.

The following percentage of the mixture consists of ingredient(s) with unknown acute dermal toxicity: 25,5 %

The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 25,5 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 21 %

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2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
boric acid	10043-35-3 233-139-2 005-007-00-2 01-2119486683-25	Repr. 1B; H360FD	<= 25
phosphoric acid, trisodium salt, dodecahydrate	10101-89-0	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	<= 25
sodium borate pentahydrate	12179-04-3 005-011-02-9	Eye Irrit. 2; H319 Repr. 1B; H360FD	<= 6,5
potassium hydroxide	1310-58-3 215-181-3 019-002-00-8	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318	<= 2

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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.
If unconscious, place in recovery position and get medical attention immediately.
- In case of skin contact : If on clothes, remove clothes.
- 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.

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Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:
Shortness of breath
Asthma

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Boron oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : No special protective equipment required.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
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.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : General industrial hygiene practice. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. To maintain product quality, do not store in heat or direct sunlight.
- Advice on common storage : No materials to be especially mentioned.
- Storage class (TRGS 510) : 6.1D, Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects
- Further information on storage stability : Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
boric acid	10043-35-3	AGW (Inhalable fraction)	0,5 mg/m ³ (Borate)	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Commission for dangerous substances, The threshold value is based on the element content of the corresponding metal., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the un-			

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	born child			
		TWA (Inhalable fraction)	2 mg/m ³ (Borate)	ACGIH
		STEL (Inhalable fraction)	6 mg/m ³ (Borate)	ACGIH
sodium borate pentahydrate	12179-04-3	AGW (Inhalable fraction)	0,5 mg/m ³ (Borate)	DE TRGS 900
Peak-limit: excursion factor (category)	2;(l)			
Further information	Commission for dangerous substances, The threshold value is based on the element content of the corresponding metal., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		TWA (Inhalable fraction)	2 mg/m ³ (Borate)	ACGIH
		STEL (Inhalable fraction)	6 mg/m ³ (Borate)	ACGIH

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection

Material : Nitrile rubber
Break through time : > 240 min
Glove thickness : 0,38 mm

Skin and body protection : Impervious clothing
Footwear protecting against chemicals

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : dispersion
Colour : yellow
Odour : odourless
pH : 8
Flash point : Method: closed cup

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does not flash

Density : 1,1 g/cm³

9.2 Other information

Flammability (liquids) : The product is not flammable.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5.110 mg/kg
GLP: no

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:

boric acid:

Acute oral toxicity : LD50 (Rat, male): > 2.600 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Remarks: Based on read across from structural related substance

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Acute inhalation toxicity : LC50 (Rat, male and female): > 2,12 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
GLP: no

phosphoric acid, trisodium salt, dodecahydrate:

Acute oral toxicity : LD50 (Rat): 7.400 mg/kg

Acute inhalation toxicity : Assessment: No data available

Acute dermal toxicity : Assessment: No data available

sodium borate pentahydrate:

Acute oral toxicity : LD50 (Rat): 2.660 mg/kg

Acute inhalation toxicity : Assessment: No data available

Acute dermal toxicity : Assessment: No data available

potassium hydroxide:

Acute oral toxicity : Assessment: No data available

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

Components:

boric acid:

Result: No skin irritation

phosphoric acid, trisodium salt, dodecahydrate:

Result: Skin irritation

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potassium hydroxide:

Species: Rabbit

Result: Corrosive after 3 minutes or less of exposure

Serious eye damage/eye irritation

Product:

Species: Rabbit

Exposure time: 72 h

Method: OECD Test Guideline 405

Result: No eye irritation

GLP: no

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

boric acid:

Result: No eye irritation

phosphoric acid, trisodium salt, dodecahydrate:

Result: Eye irritation

sodium borate pentahydrate:

Result: Eye irritation

Respiratory or skin sensitisation

Product:

Remarks: No data available

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Product:

Remarks: No data available

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

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STOT - single exposure

Product:

Remarks: No data available

Components:

phosphoric acid, trisodium salt, dodecahydrate:

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Product:

Remarks: No data available

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Components:

boric acid:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 133 mg/l
Exposure time: 48 h
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC: 2,1 mg/l
Exposure time: 87 DAYS
Species: Oncorhynchus mykiss (rainbow trout)
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 6 mg/l
Exposure time: 21 DAYS
Species: Daphnia magna (Water flea)
Remarks: Fresh water

phosphoric acid, trisodium salt, dodecahydrate:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

sodium borate pentahydrate:

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Toxicity to daphnia and other aquatic invertebrates : EC50 (Crustaceans): 141 mg/l
Exposure time: 48 h

potassium hydroxide:

Ecotoxicology Assessment

Acute aquatic toxicity : No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

boric acid:

Partition coefficient: n-octanol/water : log Pow: -1,09

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.
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.

Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

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Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : boric acid (30)
sodium borate pentahydrate (30)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : boric acid
sodium borate pentahydrate

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import : Not applicable

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of dangerous chemicals

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Water contaminating class (Germany) : WGK 1 slightly water endangering
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : Total dust:
Not applicable
Inorganic substances in powdered form:
Not applicable
Inorganic substances in vapour or gaseous form:
Not applicable
Organic Substances:
Not applicable
Carcinogenic substances:
Not applicable
Mutagenic:
Not applicable
Toxic to reproduction:
others: 25,5 %

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Not applicable

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

CH INV : The formulation contains substances listed on the Swiss Inventory, Not in compliance with the inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

AICS : Not 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

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

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H290	:	May be corrosive to metals.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H335	:	May cause respiratory irritation.
H360FD	:	May damage fertility. May damage the unborn child.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Met. Corr.	:	Corrosive to metals
Repr.	:	Reproductive toxicity
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
STOT SE	:	Specific target organ toxicity - single exposure
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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 Mari-

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time 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; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Classification of the mixture:

Repr. 1B

H360FD

STOT SE 3

H335

Classification procedure:

Calculation method

Calculation method

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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