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Section 1 Identification of the substance/mixture and the company

- 1.1 Product identifier **Calcheck**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Use of substance Reagent for water analysis
- 1.3 Supplier WAPOTEC GmbH
Franz-Sauer-Strasse 44
A-5020 Salzburg
Tel: +43 662 434342-0
Fax: +43 662 434342-3
- Contact Mr. G. Weiss
Email: office@wapotec.at
- 1.4 Emergency phone +43 662 43 43 42-0
Office hours:
MO - TH: 8.00 - 16.00
FR: 8.00 - 12.00
- Toxicity information centre Vienna:**
Phone: +43 1 406 43 43
Available 0-24h



Section 2 Hazards identification

- 2.1 Hazard classification of substance or mixture
-  according to Directive (EC) N° 1272/2008
- Repr. 1B H360FD May damage fertility.
May cause harm to the unborn child.
-  according to Directive (EC) N° 1999/45
- R60-61: May impair fertility.
May cause harm to the unborn child.

- 2.2 Label elements

 according to Directive (EC) 1272/2008



GHS08 health hazard

H360FD May damage fertility. May cause harm to the unborn child.

- P281 Use personal protective equipment as required.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P501 Apply contents/container to the hazardous waste collection according to local regulations.

☉ according to Directive (EC) N° 1999/45



T; Toxic

- R60-61: May impair fertility.
May cause harm to the unborn child.

☉ Danger defining components for labeling:

Borax (CAS: 1330-43-4)

Boric acid (CAS: 10043-35-3)

2.3 Other hazards

Not applicable.

☉ Additional Information

Restricted to professional users.

Section 3 Composition/information on ingredients

3.2 Mixtures

☉ Chemical characteristics

Mixture of organic and inorganic compounds

☉ Dangerous ingredients

Name	CAS # / EC # / Index #	Conc. %	Classification according to		
			Directive 67/548/EEC*	Regulation (EC) 1272/2008*	
Borax	1330-43-4 / 215-540-4/ 005-011-00-4	10-20	T ; R 60-61	Repr. 1B	H360FD
Boric acid	10043-35-3 233-139-2 005-007-00-2	10-20	T ; R 60-61	Repr. 1B	H360FD

* See section 16 for the full text of the R- resp. H-phrases declared above

REACH - Pre-registered substances All components are REACH pre-registered

Section 4

First-aid measures

- 4.1 Description of first aid measures
- Remove immediately all contaminated clothing.
- ☉ After inhalation
- Move affected person immediately to fresh air.
Upon unconsciousness transport and rest in recovery position.
- ☉ After skin contact
- After skin contact, wash immediately with plenty of water and soap and rinse thoroughly.
Get medical advice immediately.
- ☉ After eye contact
- After eye contact, rinse eye for several minutes (at least 15 minutes) under running water holding eye lids open.
Get medical advice.
- ☉ After ingestion
- Rinse the mouth with plenty of water and drink at least 1-2 glasses of water.
Get medical advice.
- 4.2 ☉ Most important symptoms and effects, acute and delayed
- After resorption:
- Irritation, nausea, vomiting, diarrhea
- After ingestion (large amounts):
Drop in temperature, ataxia (impaired loco motor coordination), fatigue, CNS disorders, cardiovascular disorders, cramps.
- 4.3 Indications for immediate medical attention or special treatment needed
- No further relevant information available.

Section 5

Fire-fighting measures

- 5.1 Extinguishing media
- ☉ Suitable extinguishing media
- Use fire fighting measure that suit the environment.
- ☉ Unsuitable extinguishing media for safety reasons
- None.
- 5.2 ☉ Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- 5.3 Special protective actions for fire-fighters

Special protective equipment
Wear self-contained breathing apparatus.
Wear full protective suit.

🕒 Additional information

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Ambient fire may liberate hazardous vapors.

Section 6 Accidental release of material

- 6.1 Personal precautions, protective equipment and suitable emergency procedures.
Use breathing protection against the effects of fumes/dust/aerosol.
Avoid formation of dust
Ensure sufficient ventilation.
- 6.2 Environmental precautions
Do not allow product to reach ground water, water course or sewage system.
- 6.3 Methods and material for retention and cleaning up.
Dispose of contaminated material as waste in accordance with section 13.
Pick up mechanically.
Ensure sufficient ventilation.
- 6.4 Reference to other clauses
Information on safe handling see section 7.
Protective measures see section 8
Disposal see section 13

Section 7 Handling and storage

- 7.1 Precautions for safe handling
Open and handle receptacle with care.
Avoid dust formation.
Provide sufficient ventilation of the workingroom and/or exhaust system at the workplace.
- 7.2 Conditions for safe storage including any incompatibilities
- 🕒 Fire and explosion protection measures:
The product is not combustible
 - 🕒 Design of storage rooms and container
Store in a cool location.
Protect from heat and direct sunlight.

Store product in dry conditions.

Protect from moisture and water.

Protect from light.

Keep product under lock and seal or in a manner so as to ensure that only qualified persons may access them.

☉ Material incompatibility

Store away from solvents.

☉ Recommended storage temperature : 20°C +/-5°C

☉ Storage class (VCI): 6.1 D

7.3

Specific end uses

No further information available.



Section 8

Exposure controls and personal protection

8.1

Control parameters

1330-43-4 Borax (10-20%)	
AGW (Germany)	0,5 mg/m ³ , 2(l); AGS, Y, 10 / B (calculated)
MAK (Suisse)	1 e mg/m ³
10043-35-3 boric acid (10-20%)	
AGW (Germany)	0,5 mg/m ³ 2(l); AGS, Y, 10

8.2

Exposure controls

☉ General protective and hygiene measures

Follow usual precautions when dealing with chemicals. Keep away from food and drinks. Do not eat or drink at work, wash hands before breaks and end of work. Avoid eye and skin contact. Avoid inhaling of steams/aerosols. Change contaminated work wear and clean it before the next wearing. Preventive skin protection.

Protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

☉ Respiratory protection

In case of release dust/aerosol only work with a protection mask.

Recommended filter device for short term use: Filter P3

☉ Hand protection

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Glove material:

Nitrile rubber

Recommended material thickness: $\geq 0,11$ mm

Breakthrough time of the glove material.

The exact penetration time is to be obtained from the glove manufacturer and must be observed

Permeation value: Level = 1 (< 10 min)

☉ Eye protection

Tightly sealed goggles

☉ Personal protection

Protective working clothing






Section 9

Physical and chemical properties


9.1	Information on basic physical and chemical properties.	
	☉ Appearance	Tablets
	☉ Color	Pink
	☉ Odor	Odorless
	☉ Odor threshold	No data available
	☉ pH-value (9g/l) at 20°C	8.5
	☉ Melting point	Not determined
	☉ Boiling point / Boiling range	300°C
	☉ Flash point	Not applicable
	☉ Evaporation rate	Not applicable
	☉ Flammability	No data available
	☉ Upper explosion limit	No data available
	☉ Lower explosion limit	No data available
	☉ Vapor pressure	Not applicable
	☉ Density	Not determined
	☉ Solubility in water (20°C)	Soluble
	☉ Partition coefficient: n-octanol-water	No data available
	☉ Auto ignition temperature	No data available
	☉ Decomposition temperature	No data available
	☉ Viscosity	No data available
	☉ Explosive properties	Product is not explosive
	☉ Oxidizing properties	No data available
9.2.	Other data	

None.



Section 10 Stability and reactivity

- 10.1 Reactivity
To avoid thermal decomposition do not overheat.
No hazardous reactions for intended use.
- 10.2 Chemical stability
No decomposition if used according to specifications.
- 10.3  Possibility of hazardous reactions
No hazardous reactions for intended use.
- 10.4 Conditions to avoid
Avoid extreme temperatures
No further relevant information available
- 10.5  Incompatible materials
Alkalis, reducing agents
- 10.6  Hazardous decomposition products
See section 5

Section 11 Toxicological information

- 11.1 Information on toxicological effects
Acute toxicity
Quantitative data on the toxicity of the preparation are not available.
The following statements refer to the individual components.
 LD/LC₅₀ values that are relevant for classification (literature)

1330-43-4 Borax		
Oral	LD ₅₀	1200 mg/kg (rat) (RTECS) - MERCK
10043-35-3 Boric acid		
oral	LD ₅₀	2660 mg/kg (rat) (GESTIS)
dermal	LD ₅₀	>2000 mg/kg (rat) (RTECS)
	LD ₀	1500 mg/kg (child) (MERCK)
inhalative	LC ₅₀	>2,03 mg/l (rat) (MERCK)
	NOAEL	9,6 B mg/kg (rat) (NTP)

-  Primary irritant effect:
Skin: slight irritations possible
Eye: Irritations possible
-  Sensitization

No sensitizing effect known.

☉ Subacute to chronic toxicity:

CAS-No. 10043-35-3;

MERCK: Sensitization test (guinea pig): negative (OECD 406)

☉ Cancerogenity

No data available.

☉ Mutagenicity

CAS-No. 1330-43-4:

Risk of foetal damage

Repr. 1 B

Pregnant women should not be exposed to the product.

Bacterial mutagenicity: Ames test – negative (IUCLID)

Mutagenicity (mammal cell test): chromosome aberration negative (NTP)

☉ Further information

Additional toxicological information:

Absorption: gastro-intestinal tract, mucous membranes

Toxic

Section 12 Ecological information

12.1 Toxicity

☉ Acquatic toxicity:

1330-43-4 Borax	
LC ₅₀	1085-1402 mg/l/48h (daphnia magna) (IUCLID) 340 mg/l/96h (fish)
10043-35-3 Boric acid	
EC ₅₀	133 mg/l/48h (Daphnia magna) (ECOTOX)
LC ₅₀	50-100 mg/l/96h (rainbow trout)(ECOTOX)

12.2 Persistence and degradability

No further information available.

☉ Other information:

Quantitative data on the ecological effect of this product are not available.
The following statements refer to the individual components.

12.3 Bioaccumulative potential

No further information available.

☉ Behaviour in environmental systems

10043-35-3 boric acid

log P(o/w) /0.76 (25°C) (.) (IUCLID)

- 12.4 Mobility in soil
No data available for the product itself.
- ☉ Ecotoxicological effects:
Algae toxicity:
1330-43-4 Borax
IC50 158 mg/l/96h (desmodesmus subspicatus)
(IUCLID)
- 12.5 Results of PBT- and vPvB-assessment
No data available.
- 12.6 ☉ Additional ecological information:
Water hazard class 1 (German Regulation) (self-assessment acc. VwVwS Annex 4 Nr. 3):
Slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized.

Section 13 Disposal considerations






- 13.1 ☉ Waste treatment methods
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste. Chemicals must be disposed of in compliance with national and regional regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.
- ☉ Waste key number
16 05 06
 - ☉ Waste name
Laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
 - ☉ European waste catalogue
EWC-waste key is source-related.
The decision is up to the enduser.
 - ☉ Contaminated packaging material
Chemicals must be disposed of in compliance with national and regional regulations. Under www.retrologistik.de you will find country- and substance-specific information as well as contact partners.
Recommended cleaning agent:
Water, if necessary with cleaning agent.


Section 14 Transport information


No dangerous good according to regulation for transport of dangerous goods.

- 14.1 UN-Number
Not applicable.
- 14.2 Proper UN-shipping name
Not applicable.
- 14.3 Transport hazard class
Not applicable.
- 14.4 Packaging group
Not applicable.
- 14.5 Environmental hazards
Not applicable.
- 14.6 Special precautions for the user
Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL agreement 73/78 and according to IBC-Code
Not applicable.

Section 15 Regulatory information

- 15.1 Safety-, health-, ambient- and legislation specific instructions for substance or mixture
This safety data sheet complies with the Regulations (EC) Reach N° 1907/2006.
The mixture is classified according to Dangerous Preparations Directive (EC) 1999/45 and to regulation (EC)1272/2008 Annex I.
National regulations:
- Austria:
-  Labeling according to BGBl II 2000/81 ChemV 1999.
The product is not classified and does not require hazards identification.
 -  ChemG 1996-amendment 2011.
This product is not classified hazardous (no hazardous preparation) according to the Austrian chemical legislation of 1996- amendment 2011.
 -  VbF - Directive about combustible liquids (BGBl 1991/240)
This product is not classified as combustible liquid acc. VbF.
- Germany:
-  Classification in water hazard classes according VwVwS dated 17.05.1999/annex 4.
WP 1 (low water hazardous)
 -  Employment restrictions
Observe employment restrictions for child bearing mothers and nursing mothers acc. Regulation 92/85/EEC.
Observe employment restrictions for the protection of young workers acc. to Regulation 94/33/EEC.

-  Major Accident Ordinance (12. BIm SchV)
Observe the qualifying quantities acc. to Major Accident Ordinance (annex I, no. 2)

-  Substances of very high concern (SVHC) according to REACH, Article 57

10043-35-3 Boric acid

1330-43-4 Borax

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

Section 16

Other information

The information provided on this SDS is correct to the best of our knowledge and information, but not to be considered as warranty or quality specification nor creates contractual relationship. The information given is designed only as a guidance for safe handling. Since unknown risk potentials can never be completely ruled out, the product should be handled with the usual care when dealing with chemicals and only for the uses listed in Section 1.

The categorisation according to Dangerous Preparations Directive 1999/45/EC resp. regulation CLP (EC)1272/2008 is based on the classification of the single component according to Annex VI of regulation CLP (EC)1272/2008 as well as on manufacturer's data completed by hazardous material database.

-  Relevant R-phrases

R60 May impair fertility.

R61 May cause harm to the unborn child

-  Relevant H-phrases

H360FD May damage fertility. May cause harm to the unborn child.

-  Relevant hazard classification

Not applicable

-  Edition

Number 2 replaces previous version

-  Written by

WAPOTEC GmbH

-  Short cuts

n.t. not tested

n.a. not applicable

PBT persistent, bio-accumulative, toxic

vPvB high persistent, high bio-accumulative

ECHA European Chemicals Agency (<http://www.echa.eu>)