

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reagent 130+R2225

Revision: 15.08.2025

Product code: 130+R2225

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

### 1.1. Product identifier

Reagent 130+R2225

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

#### **Use of the substance/mixture**

Reagents and laboratory chemicals

Only for laboratory and analysis purposes.

#### **Uses advised against**

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name:	AnalytiChem GmbH
	ACD
Street:	Stempelstraße 6
Place:	D-47167 Duisburg
Telephone:	0203/5194-0
E-mail:	info@analytichem.de
Contact person:	Abteilung Produktsicherheit
E-mail:	produktsicherheit@analytichem.de
Internet:	www.analytichem.de
Responsible Department:	Abteilung Produktsicherheit

Telefax: 0203/5194-290

Telephone: 0203/5194-107/117

### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

## Further Information

This product is a mixture. REACH Registration Number see section 3.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### **Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

### 2.2. Label elements

### 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### **Chemical characterization**

Mixtures in aqueous solution

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## Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7732-18-5	water			99,9936 %
	231-791-2			
10043-35-3	boric acid			0,0064 %
	233-139-2	005-007-00-2	01-2119486683-25	
	Repr. 1B; H360FD			

Full text of H and EUH statements: see section 16.

## Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
10043-35-3	233-139-2	boric acid	0,0064 %
	inhalation: LC50 = > 2,12 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3450 mg/kg		

## Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## SECTION 4: First aid measures

4.1. Description of first aid measures

## General information

No data available

## After inhalation

Provide fresh air.

## After contact with skin

Wash immediately with: Water

Remove contaminated, saturated clothing immediately.

## After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

## After ingestion

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

No data available

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

No data available

## SECTION 5: Firefighting measures

5.1. Extinguishing media

## Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

## Unsuitable extinguishing media

no restriction

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**5.2. Special hazards arising from the substance or mixture**

Non-combustible liquids

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

No data available

**For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For containment**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Handle and open container with care.

Keep container tightly closed.

Avoid contact with skin, eyes and clothes.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Wash contaminated clothing prior to re-use.

Do not breathe vapour/aerosol.

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Avoid contact with skin, eyes and clothes.

**Further information on handling**

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

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

storage temperature &lt;= 8°C

**Hints on joint storage**

No data available

**Further information on storage conditions**

Store in a dry place.

Protect against: Light

Keep cool. Protect from sunlight.

**7.3. Specific end use(s)**

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
10043-35-3	Borate compounds inorganic: boric acid	-	2		TWA (8 h)	

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
10043-35-3	boric acid			
	Worker DNEL, long-term	inhalation	systemic	8,3 mg/m³
	Worker DNEL, long-term	dermal	systemic	392 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	4,15 mg/m³
	Consumer DNEL, long-term	dermal	systemic	196 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	0,98 mg/kg bw/day
	Consumer DNEL, acute	oral	systemic	0,98 mg/kg bw/day

**PNEC values**

CAS No	Substance	Value
	Environmental compartment	
10043-35-3	boric acid	
	Freshwater	2,9 mg/l
	Freshwater (intermittent releases)	13,7 mg/l
	Marine water	2,9 mg/l
	Micro-organisms in sewage treatment plants (STP)	10 mg/l
	Soil	5,7 mg/kg

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#### **8.2. Exposure controls**

##### **Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

##### **Individual protection measures, such as personal protective equipment**

###### **Eye/face protection**

goggles

###### **Hand protection**

Tested protective gloves must be worn. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

###### **Skin protection**

Wear suitable protective clothing.

Wash hands before breaks and after work.

###### **Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

###### **Thermal hazards**

No data available

###### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

## **SECTION 9: Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	clear
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic:	No data available
Water solubility:	No data available
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	No data available
Relative density:	No data available

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Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

###### **Explosive properties**

No data available

###### **Sustained combustibility:**

No data available

###### **Self-ignition temperature**

Solid:

No data available

Gas:

No data available

###### **Oxidizing properties**

No data available

##### **Other safety characteristics**

###### **Evaporation rate:**

No data available

###### **Solvent separation test:**

No data available

###### **Solvent content:**

0

###### **Solid content:**

0

###### **Sublimation point:**

No data available

###### **Softening point:**

No data available

###### **Pour point:**

No data available

###### **No data available:**

###### **Viscosity / dynamic:**

No data available

###### **Flow time:**

No data available

##### **Further Information**

No data available

## SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

No data available

#### **10.2. Chemical stability**

Protect against:

Light

Heat

#### **10.3. Possibility of hazardous reactions**

No data available

#### **10.4. Conditions to avoid**

Light

Heat

#### **10.5. Incompatible materials**

No data available

#### **10.6. Hazardous decomposition products**

No data available

##### **Further information**

No data available

## SECTION 11: Toxicological information

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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**Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
10043-35-3	boric acid					
	oral	LD50 mg/kg	3450	Rat	Toxicology and Applied Pharmacology 23:	other: No data
	dermal	LD50 mg/kg	> 2000	Rabbit	Study report (1982)	other: FIFRA
	inhalation (4 h) dust/mist	LC50 mg/l	> 2,12	Rat	Study report (1997)	OECD Guideline 403

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Information on likely routes of exposure**

There are no data available on the mixture itself.

**Specific effects in experiment on an animal**

There are no data available on the mixture itself.

**Additional information on tests**

There are no data available on the mixture itself.

**Practical experience**

There are no data available on the mixture itself.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**Other information**

There are no data available on the mixture itself.

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**Further information**

There are no data available on the mixture itself.

**SECTION 12: Ecological information****12.1. Toxicity**

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

CAS No	Chemical name	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
10043-35-3	boric acid						
	Acute fish toxicity	LC50 79,7 mg/l	96 h		Pimephales promelas	Study report (2010)	other: ASTM E729-95 Standard Guide for C
	Acute algae toxicity	ErC50 66 mg/l	72 h		Phaeodactylum tricornutum	Study report (2011)	ISO 10253
	Acute crustacea toxicity	EC50 109 mg/l	48 h		Ceriodaphnia dubia	Study report (2010)	other: ASTM E729-95 Standard Guide for C
	Fish toxicity	NOEC 11,2 mg/l	32 d		Pimephales promelas	Study report (2010)	other: ASTM E1241-05 Standard Guide for
	Algae toxicity	NOEC 17,5 mg/l	3 d		Pseudokirchneriella subcapitata	Study report (2000)	OECD Guideline 201
	Crustacea toxicity	NOEC 25,9 mg/l	42 d		other aquatic crustacea: Hyalella azteca	Study report (2010)	other: US EPA 2000 Methods for assessing
	Acute bacteria toxicity	EC50 > 10000 mg/l ( )	3 h		activated sludge of a predominantly domestic sewag	Study report (2001)	OECD Guideline 209

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
10043-35-3	boric acid	-1,09

**BCF**

CAS No	Chemical name	BCF	Species	Source
10043-35-3	boric acid	0,558	Oncorhynchus nerka	Water Research Vol.

**12.4. Mobility in soil**

There are no data available on the mixture itself.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

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This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### **12.7. Other adverse effects**

There are no data available on the mixture itself.

#### **Further information**

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### **13.1. Waste treatment methods**

#### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### **Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## SECTION 14: Transport information

### **Land transport (ADR/RID)**

#### **14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

#### **14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

#### **14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

#### **14.4. Packing group:**

No dangerous good in sense of this transport regulation.

### **Inland waterways transport (ADN)**

#### **14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

#### **14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

#### **14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

#### **14.4. Packing group:**

No dangerous good in sense of this transport regulation.

### **Marine transport (IMDG)**

#### **14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

#### **14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

#### **14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

#### **14.4. Packing group:**

No dangerous good in sense of this transport regulation.

### **Air transport (ICAO-TI/ATA-DGR)**

#### **14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

#### **14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

#### **14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

#### **14.4. Packing group:**

No dangerous good in sense of this transport regulation.

### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:

No

## SECTION 15: Regulatory information

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

#### **EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):  
boric acid

Restrictions on use (REACH, annex XVII):

Entry 30, Entry 75

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#### National regulatory information

Water hazard class (D): - - non-hazardous to water

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 1,3,6,11,12.

#### Abbreviations and acronyms

Repr. 1B: Reproductive toxicity, hazard category 1B

#### Relevant H and EUH statements (number and full text)

H360FD May damage fertility. May damage the unborn child.

#### Further Information

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*