

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

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

#### 1.1 Product identifier

borer 21 LAB CLF

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

Reserved for industrial and professional use.

##### Relevant identified uses

Detergent

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

Borer Chemie Deutschland GmbH

**Street :** Wallbrunnstrasse 24

**Postal code/city :** 79539 Lörrach

**Country :** Deutschland

**Telephone :** +49 6022 265570

**Telefax :** +49 6022 2655721

**Information contact :**

##### Manufacturer

Borer Chemie AG

**Street :** Gewerbestrasse 13

**Postal code/city :** 4528 Zuchwil

**Country :** Schweiz

**Telephone :** +41 32 686 56 00

**Telefax :** +41 32 686 56 90

**Information contact :** product.safety@borer.ch

#### 1.4 Emergency telephone number

National Poison Inform. Centre, Medical Toxicology Unit, +44 (171) 635 91 91

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Corr. 1B ; H314 - Skin corrosion/irritation : Category 1B ; Causes severe skin burns and eye damage.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

###### Hazard pictograms



Corrosion (GHS05)

###### Signal word

Danger

###### Hazard components for labelling

DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1

###### Hazard statements

H314 Causes severe skin burns and eye damage.

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P310 Immediately call a POISON CENTER.  
P405 Store locked up.

### 2.3 Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

TETRAPOTASSIUM PYROPHOSPHATE ; REACH registration No. : 01-2119489369-18-XXXX ; EC No. : 230-785-7; CAS No. : 7320-34-5

Weight fraction :  $\geq 15 - < 30$  %  
Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

TRIPOTASSIUM ORTHOPHOSPHATE ; REACH registration No. : 01-2119971078-30-XXXX ; EC No. : 231-907-1; CAS No. : 7778-53-2

Weight fraction :  $\geq 5 - < 15$  %  
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

DIPOTASSIUM TRIOXOSILICATE ; REACH registration No. : 01-2119456888-17-XXXX ; EC No. : 215-199-1; CAS No. : 1312-76-1

Weight fraction :  $\geq 5 - < 15$  %  
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318

#### Additional information

Full text of H- and EUH-phrases: see section 16.

#### Regulation (EC) No. 648/2004: Labelling for contents

phosphates	15 - < 30	%
phosphonates	< 5	%

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact

Flush away with water and rinse. In case of skin irritation, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

#### Self-protection of the first aider

No special measures are necessary.

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

Irritating to eyes, respiratory system and skin.

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

None

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

The product itself does not burn.

##### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water spray jet, foam, extinguishing powder. Carbon dioxide (CO<sub>2</sub>)

##### Unsuitable extinguishing media

High power water jet

#### 5.2 Special hazards arising from the substance or mixture

##### Hazardous combustion products

Fire generates toxic gases.

#### 5.3 Advice for firefighters

##### Special protective equipment for firefighters

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

#### 5.4 Additional information

None

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Take the precautions customary when handling chemicals.

#### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### 6.4 Reference to other sections

See Chapter 7, 8 & 13

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. See section 8 of the safety data sheet (general health and safety measures)

##### Protective measures

###### Measures to prevent fire

No anti-explosion measures necessary.

##### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff.

#### 7.2 Conditions for safe storage, including any incompatibilities

##### Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Do not store together with Acids, oxidizing agents,

**Storage temperature :** Optimal storage temperature 20 °C . For details, see product label.

#### 7.3 Specific end use(s)

None

### SECTION 8: Exposure controls/personal protection

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

### 8.1 Control parameters

#### DNEL/DMEL and PNEC values

##### DNEL/DMEL

Limit value type :	DNEL worker (systemic) ( TETRAPOTASSIUM PYROPHOSPHATE ; CAS No. : 7320-34-5 )
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	44.08 mg/m <sup>3</sup>
Limit value type :	DNEL worker (systemic) ( TRIPOTASSIUM ORTHOPHOSPHATE ; CAS No. : 7778-53-2 )
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	8.17 mg/m <sup>3</sup>
Limit value type :	DNEL worker (systemic) ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	5.61 mg/m <sup>3</sup>
Limit value type :	DNEL worker (systemic) ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)
Limit value :	1.49 mg/kg

### 8.2 Exposure controls

Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.

#### Personal protection equipment

##### Eye/face protection

Use tightly fitting safety glasses. goggles DIN EN 166

##### Skin protection

###### Hand protection

Tested protective gloves must be worn DIN EN 374 In splash contact: Layer thickness: 0.4 mm Breakthrough time: > 30 Min. By long-term hand contact Layer thickness: 0.7 mm Breakthrough time: > 480 Min. Glove material: butyl rubber nitrile rubber The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

###### Body protection

Wear alkali-resistant protective clothing.

##### Respiratory protection

No special measures are necessary.

##### Suitable respiratory protection apparatus

No particular measures required.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** liquid

**Colour :** clear, colourless

**Odour :** characteristic

#### Safety relevant basis data

**Melting point/melting range :** not relevant

**Initial boiling point and boiling range :** ( 1013 hPa ) 100 °C

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

Decomposition temperature :	>	230	°C	
Flash point :		not applicable		
Ignition temperature :		not applicable		
Lower explosion limit :		not applicable		
Upper explosion limit :		not applicable		
Vapour pressure :	( 25 °C )	approx.	32	hPa
Density :	( 20 °C )		1.4	g/cm <sup>3</sup>
Solvent separation test :	( 20 °C )		not determined	
Water solubility :	( 20 °C )	>	100	g/l
pH value (solvent = drinking water) :	( 20 °C / 10 g/l )	approx.	10	
log P O/W :			not determined	
Flow time :	( 20 °C )		not determined	DIN-cup 4 mm
Viscosity :	( 20 °C )		not determined	
Evaporation rate :			not relevant	
Vapourisation rate :			not relevant	
Flammable solids :	Not applicable.			
Flammable gases :	Not applicable.			
Oxidising liquids :	Not applicable.			
Explosive properties :	Not applicable.			

## 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage and handling conditions(See section 7).

### 10.2 Chemical stability

Thermal decomposition above 230 °C.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with: Acids, oxidizing agents,

### 10.4 Conditions to avoid

None, if handled according to order.

### 10.5 Incompatible materials

Acids, oxidizing agents,

### 10.6 Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

##### Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg

#### Irritant and corrosive effects

Causes severe skin burns and eye damage.

##### Primary irritation to the skin

Parameter :	Primary irritation to the skin ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )
-------------	---

##### Irritation to eyes

Parameter :	Irritation to eyes ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )
-------------	---

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

### Sensitisation

No information available.

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No information available.

### STOT-single exposure

No information available.

### STOT-repeated exposure

No information available.

### Aspiration hazard

No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) algae toxicity

Parameter :	EC50 ( TETRAPOTASSIUM PYROPHOSPHATE ; CAS No. : 7320-34-5 )
Species :	Daphnia
Effective dose :	> 100 mg/l
Exposure time :	48 h
Parameter :	EC50 ( DIPOTASSIUM TRIOXOSILICATE ; CAS No. : 1312-76-1 )
Species :	Daphnia
Effective dose :	> 2000 mg/l
Exposure time :	48 h

#### Effects in sewage plants

Parameter :	Chemical oxygen demand (COD)
Effective dose :	9.05 g/kg

### 12.2 Persistence and degradability

#### Biodegradation

Parameter :	Biodegradability according to OECD
Effective dose :	> 90 %

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Other adverse effects

No information available.

### 12.7 Additional ecotoxicological information

None

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

In accordance with local official regulations.

## SECTION 14: Transport information

### 14.1 UN number

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

UN 3266

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE )

#### Sea transport (IMDG)

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE )

#### Air transport (ICAO-TI / IATA-DGR)

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. ( DIPOTASSIUM TRIOXOSILICATE )

### 14.3 Transport hazard class(es)

#### Land transport (ADR/RID)

Class(es) : 8  
Classification code : C5  
Hazard identification number (Kemler No.) : 80  
Tunnel restriction code : E  
Special provisions : LQ 1 I · E 2  
Hazard label(s) : 8

#### Sea transport (IMDG)

Class(es) : 8  
EmS-No. : F-A / S-B  
Special provisions : LQ 1 I · E 2 · Segregation Group 18 - Alkalies  
Hazard label(s) : 8

#### Air transport (ICAO-TI / IATA-DGR)

Class(es) : 8  
Special provisions : E 2  
Hazard label(s) : 8

### 14.4 Packing group

II

### 14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

### 14.6 Special precautions for user

None

## SECTION 15: Regulatory information

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

None

### 15.2 Chemical safety assessment

No information available.

## SECTION 16: Other information

The user is responsible for the observance of all required statutory provisions.

### 16.1 Indication of changes

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 14. UN proper shipping name - Land transport (ADR/RID) · 14. UN proper shipping name - Sea transport (IMDG) · 14. UN proper shipping name - Air transport (ICAO-TI / IATA-DGR)

### 16.2 Abbreviations and acronyms

None

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : borer 21 LAB CLF  
Revision : 19.05.2017  
Print date : 17.10.2021

Version : 11.0.0

---

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

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.

### 16.6 Training advice

None

### 16.7 Additional information

None

---

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.

---