

according to Commission Regulation (EU) 2020/878 as amended

# **Naturamer PhosK**

Creation date 17th February 2025 Version
Revision date 24th September 2025

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

L.1. Product identifier Naturamer PhosK

Substance / mixture mixture

UFI KECO-00MQ-R00N-GYUE

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

Mixture's intended use

Fertilizers for use in agriculture, for foliar fertilization of plants.

Main intended use

PC-FER-1 Fertilisers

Mixture uses advised against

The product should not be used in ways other than those referred in Section 1.

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

Manufacturer

Name or trade name UAB "BS Chemical"

Address Briedžio g. 13, Kretinga

Lithuania

Phone +37066373748
Email info@bs-chemical.lt
Web address www.bs-chemical.com

Competent person responsible for the safety data sheet

Name Gintarè Lisauskienė
Email gintare@bs-chemical.lt

1.4. Emergency telephone number

European emergency number: 112

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

#### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Repr. 1B, H360FD Aquatic Chronic 3, H412

#### Most serious adverse effects on human health and the environment

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility. May damage the unborn child. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

# **Hazard pictogram**





# Signal word

Danger

#### **Hazardous substances**

potassium carbonate phosphoric acid . % boric acid

Citric Acid Monohydrate

#### **Hazard statements**

H315 Causes skin irritation. H319 Causes serious eye irritation.



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H335 May cause respiratory irritation.

H360FD May damage fertility. May damage the unborn child. H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

P201 Obtain special instructions before use.
P261 Avoid breathing mist/vapours/spray.

P264 Wash hands and exposed parts of the body thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container to in accordance with national regulations.

# 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Does not contain any PMT or vPvM components.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### Chemical characterization

Mixture.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 584-08-7 EC: 209-529-3	potassium carbonate	<30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	
Index: 015-011-00-6 CAS: 7664-38-2 EC: 231-633-2	phosphoric acid . %	<15	Skin Corr. 1B, H314 Specific concentration limit: Skin Corr. 1B, H314: $C \ge 25 \%$ Eye Irrit. 2, H319: $10 \% \le C < 25 \%$ Skin Irrit. 2, H315: $10 \% \le C < 25 \%$	1, 3
Index: 005-007-00-2 CAS: 10043-35-3 EC: 233-139-2	boric acid	<5	Repr. 1B, H360FD	2, 4, 5
CAS: 5949-29-1 EC: 611-842-9	Citric Acid Monohydrate	<2	Eye Irrit. 2, H319	

#### Notes

- Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
- 2 Note 11: The classification of mixtures as reproductive toxicant is necessary if the sum of the concentrations of individual boron compounds that are classified as reproductive toxicant in the mixture as placed on the market is  $\geq 0.3$  %.



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- 3 A substance for which exposure limits are set.
- 4 Substance of very high concern SVHC.
- 5 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

#### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

#### If on skin

Beware of the contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

#### If in eves

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

#### If swallowed

Rinse out the mouth with clean water. Provide medical treatment. For persons with no symptoms, call the Toxicological Information Centre to decide about the need of medical treatment; provide information about the substances or composition of the product from the original packaging or the Safety Data Sheet of the product.

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

#### If inhaled

May cause respiratory irritation.

# If on skin

Causes skin irritation.

# If in eyes

Causes serious eye irritation.

# If swallowed

Irritation, nausea.

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

Symptomatic treatment.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

#### Unsuitable extinguishing media

Water - full jet.

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

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

#### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.



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#### **SECTION 6: Accidental release measures**

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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

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

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

#### 6.4. Reference to other sections

See the Section 7, 8 and 13.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Obtain special instructions before use. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

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

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

Storage temperature

+5...+30 °C

# 7.3. Specific end use(s)

not available

### SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

# **European Union**

#### Commission Directive 2000/39/EC

Substance name (component)	Туре	Value
phosphoris acid 9/ (CAS) 7664 39 3)	OEL 8 hours	1 mg/m³
phosphoric acid . % (CAS: 7664–38–2)	OEL 15 minutes	2 mg/m <sup>3</sup>

# **DNEL**

boric acid	boric acid						
Workers / consumers	Route of exposure	Value	Effect	Source			
Workers	Inhalation	8.3 mg/m <sup>3</sup>	Chronic effects systemic	ECHA			
Workers	Dermal	392 mg/kg bw/day	Chronic effects systemic	ECHA			
Consumers	Inhalation	4.15 mg/m <sup>3</sup>	Chronic effects systemic	ECHA			
Consumers	Dermal	196 mg/kg bw/day	Chronic effects systemic	ECHA			
Consumers	Oral	980 μg/kg bw/24h	Chronic effects systemic	ECHA			
Consumers	Dermal	980 μg/kg bw/24h	Acute effects systemic	ECHA			



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phosphoric acid . %					
Workers / consumers	Route of exposure	Value	Effect	Source	
Workers	Inhalation	10.7 mg/m <sup>3</sup>	Chronic effects systemic	ECHA	
Workers	Inhalation	1 mg/m³	Chronic effects local	ECHA	
Consumers	Inhalation	4.57 mg/m <sup>3</sup>	Chronic effects systemic	ECHA	
Consumers	Inhalation	360 μg/m³	Chronic effects local	ECHA	
Consumers	Oral	100 μg/kg bw/24h	Chronic effects systemic	ECHA	

potassium carbonate					
Workers / consumers	Route of exposure	Value	Effect	Source	
Workers	Inhalation	10 mg/m <sup>3</sup>	Chronic effects systemic	SDL	
Consumers	Inhalation	10 mg/m <sup>3</sup>	Chronic effects systemic	SDL	
Consumers	Dermal	16 mg/cm <sup>2</sup>	Chronic effects systemic	SDL	
Consumers	Dermal	8 mg/cm <sup>2</sup>	Chronic effects systemic	SDL	

#### **PNEC**

boric acid					
Route of exposure	Value	Source			
Freshwater environment	2.9 mg/l	ECHA			
Water (intermittent release)	13.7 mg/l	ECHA			
Marine water	2.9 mg/l	ECHA			
Seawater (intermittent release)	-	ECHA			
Microorganisms in sewage treatment	10 mg/l	ECHA			
Air	-	ECHA			
Soil (agricultural)	5.7 mg/kg of dry substance of soil	ECHA			

# 8.2. Exposure controls

Take off contaminated clothing and wash before reuse. Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

#### Eye/face protection

Protective goggles.

#### Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

#### **Respiratory protection**

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

# Thermal hazard

Not available.

# **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

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

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

Physical state liquid



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Colour

color intensity

Odour

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flammability

Lower and upper explosion limit

Flash point

Auto-ignition temperature

Decomposition temperature

рΗ

Kinematic viscosity Solubility in water

Partition coefficient n-octanol/water (log value)

Vapour pressure

Density and/or relative density

Density

Relative vapour density Particle characteristics

**SECTION 10: Stability and reactivity** 

9.2. Other information

not available

brown transparent

data not available data not available

data not available

data not available

data not available

data not available

data not available

data not available

8.5 (100% solution at 20-25 °C)

data not available

data not available

data not available

data not available

1.38 g/cm3 at 20-25 °C

data not available data not available

# 10.1. Reactivity

Data not available.

# 10.2. Chemical stability

The product is stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Unknown.

# 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

# 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

# 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

# **SECTION 11: Toxicological information**

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time.

#### **Acute toxicity**

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

boric acid						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Source
Oral	LD50	2600-4080 mg/kg bw		Rat		ECHA
Inhalation	LC50	2.03 mg/l	5 hours	Rat		ECHA
Dermal	LD50	2000 mg/kg bw		Rabbit		ECHA



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Route of exposure	Parameter	Value	Exposure time	Species	Sex	Source
Oral	LD <sub>50</sub>	5400 mg/kg bw		Mouse		ECHA
	LD50	2000 mg/kg bw		Rat (Rattus norvegicus)		ECHA

phosphoric acid . %						
Route of exposure Parameter Value Exposure time Species Sex Source				Source		
Oral	LD50	1518 mg/kg		Rat		SDL
Dermal	LD <sub>50</sub>	>2000 mg/kg bw		Rat		SDL

potassium carbonate						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Source
Oral	LD <sub>50</sub>	2000 mg/kg bw		Rat		SDL
Inhalation	LC50	4.96 mg/l		Rat		SDL
Dermal	LD <sub>50</sub>	2000 mg/kg bw		Rabbit		SDL

# Skin corrosion/irritation

Causes skin irritation.

boric acid					
Route of exposure	Result	Exposure time	Species	Source	
Dermal	Not irritating			EC?HA	

Citric Acid Monohydrate						
Route of exposure	Result	Exposure time	Species	Source		
Dermal	Slightly irritating			ECHA		

phosphoric acid . %						
Route of exposure	Result	Exposure time	Species	Source		
Dermal	Skin burns			ECHA		

potassium carbonate					
Route of exposure	Result	Exposure time	Species	Source	
Dermal	Irritating			SDL	

# Irritation

boric acid					
Route of exposure	Result	Exposure time	Species	Source	
Inhalation	Not irritating			ECHA	

# Serious eye damage/irritation

Causes serious eye irritation.

boric acid					
Route of exposure	Result	Exposure time	Species	Source	
Eye	Not irritating			ECHA	

# BS

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Citric Acid Monohydrate					
Route of exposure	Result	Exposure time	Species	Source	
Eye	Irritating			ECHA	
phosphoric acid . %					

phosphoric acid . %					
Route of exposure	Result	Exposure time	Species	Source	
Eye	Irreversible damage			ECHA	

potassium carbonate					
Route of exposure	Result	Exposure time	Species	Source	
Eye	Irritating			SDL	

#### Respiratory or skin sensitisation

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

boric acid						
Route of exposure	Result	Exposure time	Species	Sex	Source	
Dermal	Not sensitizing				ECHA	
Inhalation	Indeterminate				ECHA	

Citric Acid Monohydrate							
Route of exposure	Result	Exposure time	Species	Sex	Source		
Inhalation	Not sensitizing				ECHA		
Dermal	Not sensitizing				SDL		

phosphoric acid . %						
Route of exposure	Result	Exposure time	Species	Sex	Source	
Dermal	Not sensitizing				ECHA	
Inhalation	Not sensitizing				ECHA	

potassium carbonate						
Route of exposure	Result	Exposure time	Species	Sex	Source	
Inhalation	Not sensitizing				SDL	
Dermal	Not sensitizing				SDL	

# Germ cell mutagenicity

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

boric acid							
Result	Method	Exposure time	Specific target organ	Species	Sex	Source	
Negative						ECHA	

Citric Acid Monohydrate								
Result	Method	Exposure time	Specific target organ	Species	Sex	Source		
No effect						SDL		



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phosphoric acid . %								
Result	Method	Exposure time	Specific target organ	Species	Sex	Source		
No effect						ECHA		

potassium carbonate									
Result	Method	Exposure time	Specific target organ	Species	Sex	Source			
Negative	OECD 471					SDL			
Negative	OECD 476					SDL			
Negative	OECD 473					SDL			

# Carcinogenicity

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

boric acid							
Route of exposure	Parameter	Value	Result	Species	Sex	Source	
Oral	NOAEL	1150 mg/kg bw/day		Rat		ECHA	

Citric Acid Monohydrate							
Route of exposure	Parameter	Value	Result	Species	Sex	Source	
			No effect			SDL	

phosphoric acid . %								
Route of exposure	Parameter	Value	Result	Species	Sex	Source		
			No effect			ECHA		

potassium carbonate								
Route of exposure	Parameter	Value	Result	Species	Sex	Source		
Oral	NOAEL	2667 mg/kg bw/day		Rat	М	SDL		
Oral	NOAEL	3331 mg/kg bw/day		Rat	F	SDL		

# **Reproductive toxicity**

May damage fertility. May damage the unborn child.

boric acid								
Effect	Parameter	Value	Result	Species	Sex	Source		
			Indeterminate			ECHA		

Citric Acid Monohydrate								
Effect	Parameter	Value	Result	Species	Sex	Source		
			No effect			SDL		

phosphoric acid . %								
Effect	Parameter	Value	Result	Species	Sex	Source		
Developmental toxicity	NOAEL	370 mg/kg bw/day		Mouse		ECHA		



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potassium carbonate							
Effect	Parameter	Value	Result	Species	Sex	Source	
			Indeterminate	Human			
Developmental toxicity	NOEL	180 mg/kg bw/day	No effect	Rat	F	SDL	

# Toxicity for specific target organ - single exposure

May cause respiratory irritation.

Citric Acid Monohydrate							
Route of exposure	Parameter	Value	Result	Species	Sex	Source	
Inhalation			Irritating			ECHA	

# Toxicity for specific target organ - repeated exposure

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

boric acid									
Route of exposure	Parameter	Value	Result	Species	Sex	Source			
Oral	NOAEL	17.5-100 mg/kg bw/day		Rat		ECHA			
Inhalation	NOAEC	57-470 mg/m <sup>3</sup> of air				ECHA			

Citric Acid Mond	Citric Acid Monohydrate							
Route of exposure	Parameter	Value	Result	Species	Sex	Source		
			Indeterminate			ECHA		

phosphoric acid . %								
Route of exposure	Parameter	Value	Result	Species	Sex	Source		
Oral	NOAEL	322.88-492.77 mg/kg bw/day		Dog		ECHA		
Oral	LOAEL	155 mg/kg bw/day		Rat		ECHA		

potassium carbonate									
Route of exposure	Parameter	Value	Result	Species	Sex	Source			
Oral	NOAEL	2667 mg/kg bw/day		Rat	М	SDL			
Oral	NOAEL	3331 mg/kg bw/day		Rat	F	SDL			
Inhalation	NOAEC	0.2 mg/l		Rat	F/M	SDL			
Inhalation	NOAEC	0.062 mg/l		Rat	F/M	SDL			
Inhalation	NOEC	0.4 mg/l		Rat	F/M	SDL			
Inhalation	NOEC	0.123 mg/l		Rat	F/M	SDL			

# **Aspiration hazard**

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



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#### 11.2. Information on other hazards

#### **Endocrine disrupting properties**

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption for humans.

#### Other information

not available

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

# **Acute toxicity**

boric acid	boric acid									
Parameter	Value	Exposure time	Species	Environment	Source					
LC <sub>50</sub>	74-79.7 mg/l	4 days	Fish	7	ECHA					
LC50	64-544 mg/l	4 days	Aquatic invertebrates		ECHA					
NOEC	103 mg/l	48 days	Aquatic invertebrates		ECHA					
EC50	40.2-66 mg/l	72 hours	Algae		ECHA					
LOEC	70.1 mg/l	62.4 hours	Algae and other aquatic plants		ECHA					
EC50	175-10000 mg/l	3 weeks	Microorganisms		ECHA					
NOEC	10-20 mg/l	72 hours	Microorganisms		ECHA					

<b>Citric Acid Monol</b>	Citric Acid Monohydrate									
Parameter	Value	Exposure time	Species	Environment	Source					
LC50	440 mg/l	48 hours	Fish		ECHA					
LC50	1535 mg/l	24 hours	Daphnia (Daphnia magna)		ECHA					
NOEC	425 mg/l	8 days	Algae		ECHA					

phosphoric aci	phosphoric acid . %									
Parameter	Value	Exposure time	Species	Environment	Source					
EC50	100 mg/l	48 hours	Aquatic invertebrates		ECHA					
NOEC	56 mg/l	48 hours	Aquatic invertebrates		ECHA					
EC50	100 mg/l	72 hours	Algae		ECHA					
NOEC	100 mg/l	72 hours	Algae (Selenastrum capricornutum)		ECHA					
EC50	1 g/l	3 hours	Microorganisms		ECHA					
NOEC	1 g/l	3 hours	Microorganisms		ECHA					

potassium carbonate									
Parameter	Value	Exposure time	Species	Environment	Source				
LC50	68 mg/l	96 hours	Fish (Oncorhynchus mykiss)	Fresh water	SDL				
EC50	200 mg/l	48 hours	Aquatic invertebrates		SDL				
EC50	430 mg/l	48 hours	Aquatic invertebrates	Fresh water	SDL				

# **Chronic toxicity**

boric acid								
Parameter	Value	Exposure time	Species	Environment	Source			
NOEC	6.4 mg/l	34 days	Fish		ECHA			

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boric acid									
Parameter	Value	Exposure time	Species	Environment	Source				
LOEC	23 mg/l	32 days	Fish		ECHA				
LC <sub>10</sub>	18.3 mg/l	34 days	Fish		ECHA				
NOEC	6.6-25.9 mg/l	42 days	Aquatic invertebrates		ECHA				
NOEC	6-34.2 mg/l	21 days	Aquatic invertebrates		ECHA				

# 12.2. Persistence and degradability

Data for the mixture are not available.

# **Half-life time**

potassium carbonate						
Route of exposure	Value	Value determination	Source			
Soil (agricultural)			SDL			
Drinking water			SDL			

# **Biodegradability**

poric acid									
Parameter	Value	Exposure time	Environment	Result	Source				
	-		Fresh water		ECHA				
Citric Acid Mond	hydrate								
Parameter	Value	Exposure time	Environment	Result	Source				
				Biodegradable	ECHA				

phosphoric acid . %					
Parameter	Value	Exposure time	Environment	Result	Source
				Not biodegradable	SDL

# 12.3. Bioaccumulative potential

Data for the mixture are not available.

boric acid			
Parameter	Value	Environment	Source
	-	Fresh water	ECHA
		<u> </u>	
Citric Acid Monohydrate	9		
Parameter	Value	Environment	Source
	0		SDL
phosphoric acid . %			
Parameter	Value	Environment	Source
	n		SDI

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potassium carbonate			
Parameter	Value	Environment	Source
	-		

#### 12.4. Mobility in soil

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PMT or vPvM components.

boric acid			
Parameter	Value	Result	Source
	-		ECHA
Citric Acid Monoh	ydrate		
Parameter	Value	Result	Source
Koc	10		ECHA
phosphoric acid .	%		
Parameter	Value	Result	Source
		Low	SDL
potassium carbon	ate		
Parameter	Value	Result	Source
		Biodegradable	SDI

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

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PBT or vPvB components.

#### 12.6. Endocrine disrupting properties

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption in the environment.

#### 12.7. Other adverse effects

Not available.

#### **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

# Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

06 03 14  $\,$  solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

02 01 08\* agrochemical waste containing hazardous substances

#### Packaging waste type code

15 01 10\* packaging containing residues of or contaminated by hazardous substances

15 01 02 plastic packaging

(\*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste



according to Commission Regulation (EU) 2020/878 as amended

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#### **SECTION 14: Transport information**

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

#### **SECTION 15: Regulatory information**

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

boric acid

Restriction	Conditions of restriction
30	1. Shall not be placed on the market, or used,  — as substances,  — as constituents of other substances, or,  — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:  — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,
	— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.
	Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:
	"Restricted to professional users".
	2. By way of derogation, paragraph 1 shall not apply to:  (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;  (b) cosmetic products as defined by Directive 76/768/EEC;  (c) the following fuels and oil products:  — motor fuels which are covered by Directive 98/70/EC,  mineral oil products intended for use as fuel in mobile or fixed combustion plants.
	<ul> <li>mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>fuels sold in closed systems (e.g. liquid gas bottles);</li> <li>(d) artists' paints covered by Regulation (EC) No 1272/2008;</li> <li>(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.</li> </ul>
	(f) devices covered by Regulation (EU) 2017/745.



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#### 15.2. Chemical safety assessment

not available

#### **SECTION 16: Other information**

# A list of standard risk phrases used in the safety data sheet

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

H360FD May damage fertility. May damage the unborn child. H412 Harmful to aquatic life with long lasting effects.

#### Guidelines for safe handling used in the safety data sheet

P201 Obtain special instructions before use.
P261 Avoid breathing mist/vapours/spray.

P264 Wash hands and exposed parts of the body thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container to in accordance with national regulations.

#### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

# Key to abbreviations and acronyms used in the safety data sheet

ADR Agreement concerning the international carriage of dangerous goods by road

Aquatic Chronic Hazardous to the aquatic environment (chronic)

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50 % of the population

Eye Irrit. Eye irritation

EINECS European Inventory of Existing Commercial Chemical Substances
EmS Emergency Response Procedures for Ships Carrying Dangerous Goods

EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC10 Lethal concentration of a substance in which it can be expected death of 10% of the

population

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population



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LD50 Lethal dose of a substance in which it can be expected death of 50% of the

population

LOAEL Lowest observed adverse effect level log Kow Octanol-water partition coefficient NOAEC No observed adverse effect concentration

NOAEL No observed adverse effect level
NOEC No observed effect concentration

NOEL No observed effect level
OEL Occupational Exposure Limits

PBT Persistent, bioaccumulative and toxic

PMT Persistent, mobile and toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

Repr. Reproductive toxicity

RID Regulation concerning the International Carriage of Dangerous Goods by Rail

Skin Corr. Skin corrosion Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

UN number Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very persistent and very bioaccumulative

vPvM Very persistent and very mobile

# **Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### More information

Classification procedure - calculation method.

#### **Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.