EU safety data sheet

Trade name: KRONES colclean IC 4006

Current version : 1.0.1, issued: 08.06.2021 **Replaced version:** 1.0.0, issued: 03.07.2020 **Region:** GB

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

1.1 Product identifier

Trade name

KRONES colclean IC 4006

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

Relevant identified uses of the substance or mixture
Cleaning agent

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
KIC KRONES Internationale Cooperationsgesellschaft mbH
Böhmerwaldstraße 5
93073 Neutraubling

Telephone no.	+49 9401 70-3020
Fax no.	+49 9401 70-3696
e-mail	kic@kic-krones.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)
In case of transport incidents and other emergencies:
+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Acute Tox. 4; H302
Eye Dam. 1; H318
Met. Corr. 1; H290
Skin Corr. 1B; H314

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms


GHS05


GHS07

Signal word
Danger

Hazardous component(s) to be indicated on label:
phosphoric acid
l-(+)-lactic acid

Hazard statement(s)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

Precautionary statement(s)

P260	Do not breathe mist/vapours/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3 Other hazards

PBT assessment
The product is not considered to be a PBT.

vPvB assessment
The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**phosphoric acid**			
	7664-38-2 231-633-2 015-011-00-6 01-2119485924-24	Met. Corr. 1; H290 Skin Corr. 1B; H314 Acute Tox. 4; H302 Eye Dam. 1; H318	>= 25.00 - < 50.00	wt%
2	**formic acid**		**pls. refer to footnote (2)**	
	64-18-6 200-579-1 607-001-00-0 01-2119491174-37	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Acute Tox. 3; H331 EUH071	>= 5.00 - < 10.00	wt%
3	**l-(+)-lactic acid**			
	79-33-4 201-196-2 - 01-2119474164-39	Eye Dam. 1; H318 Skin Irrit. 2; H315	< 5.00	wt%
4	**glycolic-acid**			
	79-14-1 201-180-5 - 01-2119485579-17	Acute Tox. 4; H332 Skin Corr. 1B; H314	< 5.00	wt%
5	**Fatty alcohol alkoxylate 2**			
	- - -	Aquatic Chronic 3; H412 Eye Dam. 1; H318	< 2.50	wt%

	-			

Full Text for all H-phrases and EUH-phrases: pls. see section 16
(2) According to the latest state of knowledge and applying the criteria set out in annex I to Regulation (EC) No 1272/2008 , the aforementioned classification is required. This classification goes beyond the classification set out in table 3, Annex VI to Regulation (CE) No 1272/2008.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	B	Skin Irrit. 2; H315: C >= 10% Eye Irrit. 2; H319: C >= 10% Skin Corr. 1B; H314: C >= 25% Eye Dam. 1; H318: C >= 25%	-	-
2	B	Skin Irrit. 2; H315: C >= 2% Eye Irrit. 2; H319: C >= 2% Eye Dam. 1; H318: C >= 10% Skin Corr. 1B; H314: C >= 10% Eye Dam. 1; H318: C >= 90% Skin Corr. 1A; H314: C >= 90%	-	-

Full text for the notes: pls. see section 16 “Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)”.

Acute toxicity estimate (ATE) values			
No	**oral**	**dermal**	**inhalative**
1	500 mg/kg bodyweight		
2	730 mg/kg bodyweight		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. Do not use mouth-to-mouth or mouth-to-nose resuscitation. Call a doctor immediately.

After skin contact
Wash immediately with plenty of water for several minutes. Seek medical attention.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

After ingestion
Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
burns

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
All quenching (arc-extinguishing) media available. Extinguishing measures to suit surroundings.

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide; Phosphorus oxides

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Do not inhale explosion and/or combustion byproducts. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Use personal protective clothing. Ensure adequate ventilation. Remove persons to safety.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Use barrier skin cream. Remove contaminated clothing and shoes and launder thoroughly before reusing. Have emergency shower available. Provide eye wash fountain in work area.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original. Provide acid-resistant floor.

Incompatible products

Substances to be avoided, see section 10. Do not store together with: Metals; Alkalies; Reducing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	phosphoric acid	7664-38-2	231-633-2

	List of approved workplace exposure limits (WELs) / EH40				
	Orthophosphoric acid				
	WEL short-term (15 min reference period)	2	mg/m³		
	WEL long-term (8-hr TWA reference period)	1	mg/m³		
	2000/39/EC				
	Orthophosphoric acid				
	WEL short-term (15 min reference period)	2	mg/m³		
	WEL long-term (8-hr TWA reference period)	1	mg/m³		
2	**formic acid**	**64-18-6**		**200-579-1**	
	2006/15/EC				
	Formic acid				
	WEL long-term (8-hr TWA reference period)	9	mg/m³	5	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Formic acid				
	WEL long-term (8-hr TWA reference period)	9.6	mg/m³	5	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**phosphoric acid**			**7664-38-2 231-633-2**	
	inhalative	Long term (chronic)	local	1	mg/m³
	inhalative	Short term (acut)	local	2	mg/m³
	inhalative	Long term (chronic)	systemic	10.7	mg/m³
2	**formic acid**			**64-18-6 200-579-1**	
	inhalative	Long term (chronic)	local	9.5	mg/m³
	inhalative	Short term (acut)	systemic	19	mg/m³
3	**glycolic-acid**			**79-14-1 201-180-5**	
	dermal	Long term (chronic)	systemic	57.69	mg/kg/day
	inhalative	Short term (acut)	systemic	9.2	mg/m³
	inhalative	Short term (acut)	local	9.2	mg/m³
	inhalative	Long term (chronic)	systemic	10.56	mg/m³
	inhalative	Long term (chronic)	local	1.53	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**phosphoric acid**			**7664-38-2 231-633-2**	
	oral	Long term (chronic)	systemic	0.1	mg/kg/day
	inhalative	Long term (chronic)	local	0.36	mg/m³
	inhalative	Long term (chronic)	systemic	4.57	mg/m³
2	**formic acid**			**64-18-6 200-579-1**	
	inhalative	Long term (chronic)	local	3	mg/m³
	inhalative	Short term (acut)	systemic	9.5	mg/m³
3	**glycolic-acid**			**79-14-1 201-180-5**	
	oral	Long term (chronic)	systemic	0.75	mg/kg/day
	dermal	Short term (acut)	local	28.85	mg/kg/day
	inhalative	Short term (acut)	systemic	2.3	mg/m³
	inhalative	Short term (acut)	local	2.3	mg/m³
	inhalative	Long term (chronic)	systemic	2.6	mg/m³

PNEC values

No	Substance name		CAS / EC no
	ecological compartment	**Type**	**Value**

1	**formic acid**		**64-18-6 200-579-1**	
	water	fresh water	2	mg/L
	water	marine water	0.2	mg/L
	water	Aqua intermittent	1	mg/L
	water	fresh water sediment	13.4	mg/kg dry weight
	water	marine water sediment	1.34	mg/kg dry weight
	soil	-	1.5	mg/kg dry weight
	sewage treatment plant	-	7.2	mg/L
2	**glycolic-acid**		**79-14-1 201-180-5**	
	water	fresh water	0.031	mg/L
	water	marine water	0.0031	mg/L
	water	Aqua intermittent	0.312	mg/L
	water	fresh water sediment	0.115	mg/kg
	with reference to: dry weight			
	water	marine water sediment	0.011	mg/kg
	with reference to: dry weight			
	soil	-	0.007	mg/kg
	with reference to: dry weight			
	sewage treatment plant	-	7	mg/L
	secondary poisoning	-	16.66	mg/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.
Respiratory filter (gas) : ABEK

Eye / face protection
Safety glasses with side protection shield (EN 166); Tightly fitting safety glasses (EN 166).

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>=	0.5	
Breakthrough time	>=	480	min
Appropriate Material	viton		
Material thickness	>=	0.4	
Breakthrough time	>=	480	min
Appropriate Material	nitrile rubber		
Material thickness	>=	0.35	mm
Breakthrough time	>=	480	min

Other
Acid-resistant protective clothing

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form/Colour
liquid
colourless

Odour
pungent

pH value		
Value		1

Boiling point / boiling range			
Value	>	100	°C

Melting point/freezing point			
Value	<	0	°C

Decomposition temperature
No data available

Flash point
No data available

Ignition temperature
No data available

Auto-ignition temperature	
Comments	Product is not selfigniting.

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density		
Value	appr.	1.4

Density
No data available

Solubility in water	
Comments	completely soluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**

log Pow		-2.1	
Reference temperature		23	°C
Method	92/69/EEC, A.8		
Source	ECHA		
2	**l-(+)-lactic acid**	**79-33-4**	**201-196-2**
log Pow	appr.	-0.54	
Reference temperature		25	°C
Source	ECHA		
3	**glycolic-acid**	**79-14-1**	**201-180-5**
log Pow	<	0.3	
Reference temperature		25	°C
Method	OECD 117		
Source	ECHA		

Viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dangerous reactions are not expected if the product is handled according to its intended use.

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

10.3 Possibility of hazardous reactions
Reactions with metals, with evolution of hydrogen.

10.4 Conditions to avoid
High temperatures.

10.5 Incompatible materials
Metals; Alkalies; Oxidizing agents

10.6 Hazardous decomposition products
None, if handled according to intended use.

SECTION 11: Toxicological information

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

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**KRONES colclean IC 4006**
ATE (Mixture)	869.82
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute oral toxicity					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**phosphoric acid**	**7664-38-2**		**231-633-2**	
LD50	300	-	2000		mg/kg bodyweight
Species	rat				
Method	OECD 423				
Source	ECHA				
2	**formic acid**	**64-18-6**		**200-579-1**	
LD50			730		mg/kg bodyweight

Species	rat
Method	OECD 401
Source	ECHA

3	l-(+)-lactic acid	79-33-4	201-196-2

LD50	3543	mg/kg bodyweight
Species	rat (female)	
Method	EPA OPP 81-1	
Source	ECHA	

4	glycolic-acid	79-14-1	201-180-5

LD50	2040	mg/kg bodyweight
Species	rat	
Method	EPA OPP 81-1	
Source	ECHA	

Acute dermal toxicity

No	Substance name	CAS no.	EC no.
1	l-(+)-lactic acid	79-33-4	201-196-2

LD50	> 2000	mg/kg bodyweight
Species	rabbit	
Method	EPA OPP 81-2	
Source	ECHA	

Acute inhalational toxicity (result of the ATE calculation for the mixture)

No	Product Name
1	KRONES colclean IC 4006

Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).

Acute inhalational toxicity

No	Substance name	CAS no.	EC no.
1	formic acid	64-18-6	200-579-1

LC50	7.85	mg/l
Duration of exposure	4	h
State of aggregation	Vapour	
Species	rat	
Method	OECD 403	
Source	ECHA	

2	l-(+)-lactic acid	79-33-4	201-196-2

LC50	> 7.94	mg/l
Duration of exposure	4	h
State of aggregation	Dust/mist	
Species	rat	
Method	OECD 403	
Source	ECHA	

3	glycolic-acid	79-14-1	201-180-5

LC50	3.6	mg/l
Duration of exposure	4	h
State of aggregation	mist	
Species	rat	
Method	OECD 403	
Source	ECHA	

Skin corrosion/irritation

No	Substance name	CAS no.	EC no.
1	phosphoric acid	7664-38-2	231-633-2

Species	rabbit
Source	ECHA
Evaluation	strongly corrosive

2	glycolic-acid	79-14-1	201-180-5
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		corrosive	

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
Species		rabbit	
Source		ECHA	
Evaluation		strongly corrosive	
2	**l-(+)-lactic acid**	**79-33-4**	**201-196-2**
Source		ECHA	
Evaluation		Irreversible effects on the eye	
3	**glycolic-acid**	**79-14-1**	**201-180-5**
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
2	**glycolic-acid**	**79-14-1**	**201-180-5**
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**formic acid**	**64-18-6**	**200-579-1**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	**glycolic-acid**	**79-14-1**	**201-180-5**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**formic acid**	**64-18-6**	**200-579-1**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
3	**glycolic-acid**	**79-14-1**	**201-180-5**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**

1	glycolic-acid	79-14-1	201-180-5
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
Route of exposure		inhalational	
NOAEC		0.122	mg/l
Duration of exposure		13	week/s
Species		rat	
Method		OECD 413	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	
2	**glycolic-acid**	**79-14-1**	**201-180-5**
Route of exposure		oral	
Species		rat	
Method		OECD 408	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
LC50		130	mg/l
Duration of exposure		96	h
Species		Danio rerio	
with reference to		CAS 540-69-2	
Method		OECD 203	
Source		ECHA	
2	**glycolic-acid**	**79-14-1**	**201-180-5**
LC50		164	mg/l
Duration of exposure		96	h
Species		Pimephales promelas	
Method		EPA OPP 72-2	
Source		ECHA	

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
EC50	>	100	mg/l
Duration of exposure		48	h
Species		Daphnia magna	

Method	OECD 202		
Source	ECHA		
2	**formic acid**	**64-18-6**	**200-579-1**
EC50		365	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
with reference to	CAS 540-69-2		
Method	OECD 202		
Source	ECHA		
3	**glycolic-acid**	**79-14-1**	**201-180-5**
EC50		141	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
NOEC	>=	100	mg/l
Duration of exposure		21	day(s)
Species	Daphnia magna		
Method	OECD 211		
Source	ECHA		

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
EC50	>	100	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Method	OECD 201		
Source	ECHA		
2	**formic acid**	**64-18-6**	**200-579-1**
EC50	>	1000	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
with reference to	CAS 590-29-4		
Method	OECD 201		
Source	ECHA		
3	**glycolic-acid**	**79-14-1**	**201-180-5**
ErC50		44	mg/l
Duration of exposure		72	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)
No data available

Bacteria toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**phosphoric acid**	**7664-38-2**	**231-633-2**
EC50	>	1000	mg/l
Duration of exposure		3	h
Species	activated sludge		
Method	OECD 209		
Source	ECHA		
2	**formic acid**	**64-18-6**	**200-579-1**
NOEC		72	mg/l
Duration of exposure		13	day(s)
Species	activated sludge		

Method	92/69/EEC, C.3.		
Source	ECHA		
3 glycolic-acid	**79-14-1**		**201-180-5**
EC50	>	100	mg/l
Duration of exposure		3	h
Species	activated sludge		
Method	OECD 209		
Source	ECHA		

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
Type	aerobic biodegradation		
Value		100	%
Duration		14	day(s)
Method	OECD 301 C		
Source	ECHA		
Evaluation	readily biodegradable		
2	**glycolic-acid**	**79-14-1**	**201-180-5**
Type	aerobic biodegradation		
Value		78	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		

Abiotic Degration			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
Type	Hydrolysis		
Half-life		119	h
pH value		7	
Reference temperature		50	°C
Method	440/2008/EC C.7.		
Source	ECHA		

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
log Pow		-2.1	
Reference temperature		23	°C
Method	92/69/EEC, A.8		
Source	ECHA		
2	**l-(+)-lactic acid**	**79-33-4**	**201-196-2**
log Pow	appr.	-0.54	
Reference temperature		25	°C
Source	ECHA		
3	**glycolic-acid**	**79-14-1**	**201-180-5**
log Pow	<	0.3	
Reference temperature		25	°C
Method	OECD 117		
Source	ECHA		

12.4 Mobility in soil

Mobility in soil			
No	**Substance name**	**CAS no.**	**EC no.**
1	**formic acid**	**64-18-6**	**200-579-1**
log Koc	<	1.25	
Reference temperature		23	°C

Method	OECD 121		
Source	ECHA		
2 glycolic-acid	**79-14-1**		**201-180-5**
log Koc	<	1.4	
Reference temperature		25	°C
Method	OECD 121		
Source	ECHA		

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	8
Classification code	C1
Packing group	II
Hazard identification no.	80
UN number	UN3264
Proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name	phosphoric acid formic acid
Tunnel restriction code	E
Label	8

14.2 Transport IMDG

Class	8
Packing group	II
UN number	UN3264
Proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name	phosphoric acid formic acid
EmS	F-A, S-B
Label	8

14.3 Transport ICAO-TI / IATA

Class	8
Packing group	II
UN number	UN3264
Proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s.
Technical name	phosphoric acid

	formic acid
Label	8

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
This product is not subject to Part 1 or 2 of Annex I.

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH071	Corrosive to the respiratory tract.
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

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.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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