EU safety data sheet

Trade name: KRONES colclean FC 3001

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

1.1 Product identifier

Trade name

KRONES colclean FC 3001

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
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
Aquatic Chronic 3; H412
Eye Dam. 1; H318
Met. Corr. 1; H290
Skin Corr. 1; H314

Classification information
Product is classified as “Corrosive” based on the extreme pH-value, see:
- Regulation 1272/2008 (CLP), Annex. I, number 3.2.2.2 / 3.2.3.1.2
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

Hazard statement(s)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

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	**Isotridecanol, ethoxylated**			
	9043-30-5 - - -	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 10.00 - < 25.00	wt%
3	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**			
	- 931-292-6 - 01-2119490061-47	Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 Eye Dam. 1; H318 Skin Irrit. 2; H315	< 5.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

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%	-	-

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		
3	1064 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. In case of persisting adverse effects consult a physician.

After skin contact
In case of contact with skin wash off with water. Call a doctor immediately.

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 the mouth thoroughly with water. 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
Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

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: Toxic gases/vapours; Carbon monoxide and carbon dioxide; Phosphorus oxides; Nitrogen oxides (NOx)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. 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. Ensure adequate ventilation. Remove persons to safety. Avoid breathing vapours.

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. Remove contaminated clothing and shoes and launder thoroughly before reusing. Have emergency shower available. Provide eye wash fountain in work area. Use barrier skin cream.

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.

Incompatible products

Substances to be avoided, see section 10.

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	

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	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**			**- 931-292-6**	
	dermal	Long term (chronic)	systemic	11	mg/kg/day
	inhalative	Long term (chronic)	systemic	6.2	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
	inhalative	Long term (chronic)	local	0.36	mg/m³
2	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**			**- 931-292-6**	
	oral	Long term (chronic)	systemic	0.44	mg/kg/day
	dermal	Long term (chronic)	systemic	5.5	mg/kg/day
	inhalative	Long term (chronic)	systemic	1.53	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**		**- 931-292-6**	
	water	fresh water	0.034	mg/L
	water	marine water	0.003	mg/L
	water	Aqua intermittent	0.034	mg/L
	water	fresh water sediment	5.24	mg/kg dry weight
	water	marine water sediment	0.524	mg/kg dry weight
	soil	-	1.02	mg/kg dry weight
	sewage treatment plant	-	24	mg/L
	secondary poisoning	-	11.1	mg/kg 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. Multi-purpose filter ABEK; Short term: filter apparatus, Filter A/P2

Eye / face protection
Safety glasses with side protection shield (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	mm
Breakthrough time	>=	480	min
Appropriate Material	viton		
Material thickness	>=	0.4	mm

Breakthrough time	>=	480	min
Appropriate Material	nitrile rubber		
Material thickness	>=	0.35	mm
Breakthrough time	>=	480	min

Other
Chemical-resistant work clothes.

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
liquid

Colour
yellowish

Odour
characteristic

pH value	
Value	2

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.

Oxidising properties
not oxidizing

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	1.2

Density

No data available

Solubility in water	
Comments	Completely miscible

Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**

log Pow	<	2.7
Method	calculated	
Source	ECHA	

Kinematic 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
No data available.

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
Heat, naked flames and other ignition sources.

10.5 Incompatible materials
Bases; Oxidizing agents; Metals

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 FC 3001**

ATE (Mixture)	1107.18 mg/kg
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	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6

LD50	1064	mg/kg bodyweight
Species	rat	
Method	OECD 401	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are met.	

Acute dermal toxicity

No	Substance name	CAS no.	EC no.
1	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6

LD50	> 2000	mg/kg bodyweight
Species	rabbit	
Method	OECD 402	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Acute inhalational toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitisation

No	Substance name	CAS no.	EC no.
1	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6

Route of exposure	Skin
Species	guinea pig
Method	OECD 406
Source	ECHA
Evaluation	non-sensitizing
Evaluation/classification	Based on available data, the classification criteria are not met.

Germ cell mutagenicity

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

Type of examination	in vitro gene mutation study in bacteria
Method	OECD 471
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

2	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6

Type of examination	In vitro Mammalian Cell Micronucleus Test
Species	Human Lymphocyte
Method	OECD 478
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	Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides	-	931-292-6

Route of exposure	oral
Type of examination	Reproduction/Developmental Toxicity Screening Test
Species	rat
Method	OECD 422

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**

Route of exposure	oral
Species	rat
Method	OECD 451
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	**phosphoric acid**	**7664-38-2**	**231-633-2**

Route of exposure	oral
Species	rat
Method	OECD 422
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

2	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**

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	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**

LC50	2.67	-	3.46	mg/l
Duration of exposure			96	h
Species	Pimephales promelas			
Method	APHA Standard Method (1971)			
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	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**
EC50		10.5	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)
No data available

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	**Isotridecanol, ethoxylated**	**9043-30-5**	**-**
EC50	1 -	10	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Method	OECD 201		
Source	supplier		
3	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**
ErC50		0.86	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		

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Isotridecanol, ethoxylated**	**9043-30-5**	**-**
Value	>	60	%
Method	OECD 301 B		
Source	Literature value		
2	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	**-**	**931-292-6**
Value		90	%
Duration		28	day(s)
Method	OECD 301 B		
Source	ECHA		
Evaluation	readily biodegradable		

Abiotic Degration

No	Substance name	CAS no.	EC no.
1	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	-	931-292-6

Type	Hydrolysis
Method	OECD 111
Source	ECHA
Evaluation/classification	stable

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides**	-	931-292-6

log Pow	<	2.7
Method	calculated	
Source	ECHA	

12.4 Mobility in soil

No data available.

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.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

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 UN number or ID number

ADR/RID/ADN	UN3264
IMDG	UN3264
ICAO-TI / IATA	UN3264

14.2 UN proper shipping name

ADR/RID/ADN	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name	phosphoric acid
IMDG	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name	phosphoric acid
ICAO-TI / IATA	Corrosive liquid, acidic, inorganic, n.o.s.

Technical name phosphoric acid

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	8
Label	8
Classification code	C1
Tunnel restriction code	E
Hazard identification no.	80
IMDG - Class	8
Label	8
ICAO-TI / IATA - Class	8
Label	8

14.4 Packing group

ADR/RID/ADN	II
IMDG	II
ICAO-TI / IATA	II

14.5 Environmental hazards

EmS F-A, S-B

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
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	

No	Substance name	CAS no.	EC no.	No
1	**phosphonic acid**	**13598-36-2**	**237-066-7**	**75**
2	**phosphoric acid**	**7664-38-2**	**231-633-2**	**75**

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

A chemical safety assessment has been carried out for the following substance/s in this mixture:
CAS no. 13598-36-2

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)

H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic 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.

Prod-ID 760623