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

## 1.1 Product identifier

Trade name

## **KRONES hydrocare 1905**

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

#### Relevant identified uses of the substance or mixture

membrane cleaner

## 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. 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





Signal word

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Danger

Hazardous component(s) to be indicated on label:

potassium hydroxide

tetrasodium-ethylenediaminetetraacetate

sodium hydroxide

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 dust/fume/gas/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

No data available.

## **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		Addit	ional informatio	n	
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Conc	entration		%
	REACH no	, , , , ,				
1	potassium hydroxi	de				
	1310-58-3	Acute Tox. 4; H302	>=	10.00 - <	25.00	wt%
	215-181-3	Skin Corr. 1A; H314				
	019-002-00-8	Met. Corr. 1; H290				
	01-2119487136-33	Eye Dam. 1; H318				
2	tetrasodium-ethyle	nediaminetetraacetate				
	64-02-8	Eye Dam. 1; H318	>=	5.00 - <	10.00	wt%
	200-573-9	Acute Tox. 4; H332				
	607-428-00-2	Acute Tox. 4; H302				
	01-2119457892-27	STOT RE 2; H373				
3	sodium hydroxide					
	1310-73-2	Skin Corr. 1A; H314	>=	5.00 - <	10.00	wt%
	215-185-5	Met. Corr. 1; H290				
	011-002-00-6	Eye Dam. 1; H318				
	01-2119457892-27	151111				

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	-	Skin Irrit. 2; H315: C >= 0.5%	-	-
		Eye Irrit. 2; H319: C >= 0.5%		
		Skin Corr. 1B; H314: C >= 2%		
		Skin Corr. 1A; H314: C >= 5%		
3	-	Skin Irrit. 2; H315: C >= 0.5%	-	-
		Eye Irrit. 2; H319: C >= 0.5%		
		Skin Corr. 1B; H314: C >= 2%		
		Skin Corr. 1A; H314: C >= 5%		

## Acute toxicity estimate (ATE) values

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No	oral	dermal	inhalative
1	333 mg/kg bodyweight		
2	1780 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. Seek medical advice immediately.

#### 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. 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 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

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; Pyrolysis products; Carbon monoxide and carbon dioxide

## 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. Do not allow run-off from fire fighting to enter drains or water courses.

## **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. Avoid contact with skin, eyes and clothing.

## 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

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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. Clean skin thoroughly after work; apply skin cream. 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. Keep from freezing. Protect from sun.

## 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 alkali-resistant floor.

#### Incompatible products

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

## 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	potassium hydroxide	1310-58-3		215-181-3	
	List of approved workplace exposure limits (WELs) / EH40				
	Potassium hydroxide (as Cyanide)				
	WEL short-term (15 min reference period)	5	mg/m³		
	WEL long-term (8-hr TWA reference period)	1	mg/m³		
2	sodium hydroxide	1310-73-2		215-185-5	
	List of approved workplace exposure limits (WELs) /	EH40			
	Sodium hydroxide				
	WEL short-term (15 min reference period)	2	mg/m³		

## **DNEL, DMEL and PNEC values**

## **DNEL values (worker)**

No	Substance name			CAS / EC	no
	Route of exposure	Exposure time	Effect	Value	
1	1 potassium hydroxide		1310-58-	3	
				215-181-	3
	inhalative	Long term (chronic)	local	1	mg/m³
2	tetrasodium-ethylenediar	ninetetraacetate		64-02-8	
				200-573-	9
	inhalative	Long term (chronic)	local	1.5	mg/m³
	inhalative	Short term (acut)	local	3	mg/m³

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3 sodium hydroxide		1310-73-2 215-185-5			
	inhalative	Long term (chronic)	local	1	mg/m³

## **DNEL value (consumer)**

No	Substance name			CAS / EC no	)
	Route of exposure	Exposure time	Effect	Value	
1	potassium hydroxide			1310-58-3	
				215-181-3	
	inhalative	Long term (chronic)	local	1	mg/m³
2	tetrasodium-ethylenediar	ninetetraacetate		64-02-8	
				200-573-9	
	oral	Long term (chronic)	systemic	25	mg/kg/day
	inhalative	Long term (chronic)	local	0.6	mg/m³
	inhalative	Short term (acut)	local	1.2	mg/m³
3	sodium hydroxide			1310-73-2	
				215-185-5	
	inhalative	Long term (chronic)	local	1	mg/m³

#### **PNEC values**

No	Substance name		CAS / EC no	
	ecological compartment	Туре	Value	
1	tetrasodium-ethylenediaminetetraacet	ate	64-02-8 200-573-9	
				-
	water	fresh water	2.2	mg/L
	water	marine water	0.22	mg/L
	water	Aqua intermittent	1.2	mg/L
	soil	-	0.72	mg/kg dry
				weight
	sewage treatment plant	-	43	mg/L

## 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.

Respirator B-P3

## 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 workstation 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	viton		
Material thickness	>=	0.4	mm
Breakthrough time	>	480	min
Appropriate Material	butyl rubber		
Material thickness	>=	0.5	mm
Breakthrough time	>	480	min
Appropriate Material	PVC		
Material thickness	>=	0.5	mm
Breakthrough time	>	480	min

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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/Colour		
liquid yellowish		
Odour		
characteristic		
pH value		
Value	13	
Boiling point / boiling range		
No data available		
Melting point/freezing point	0 00	
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	1.34	
Density		
No data available		
Solubility in water		
Comments	Completely miscible	
Solubility		

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No data available

## Partition coefficient n-octanol/water (log value)

No data available

## 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. Exothermic reaction with: acids

## 10.4 Conditions to avoid

None, if handled according to intended use.

## 10.5 Incompatible materials

Oxidizing agents; Acids; Metals; Halogenated compounds

#### 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

Acu	Acute oral toxicity (result of the ATE calculation for the mixture)			
No	Product Name			
1	KRONES hydrocare 1905			
ATE	(Mixture)	1522.84		
Meth	nod	Calculation method according Regulation (EC) No 1272/2008,		
		(CLP), annex I, part 3, section 3.1.3.6.		

Acu	Acute oral toxicity				
No	Substance name		CAS no.		EC no.
1	potassium hydroxide		1310-58-3		215-181-3
LD5	0			333	mg/kg bodyweight
Spe	cies	rat			
Met	hod	OECD 425			
Sou	rce	ECHA			
2	tetrasodium-ethylenediaminetetraaceta	ite	64-02-8		200-573-9
LD5	0			1780	mg/kg bodyweight
Spe	cies	rat (female)			
Sou	rce	ECHA			

# Acute dermal toxicity No data available

Acute inhalational toxicity (result of the ATE calculation for the mixture)			
No	Product Name		
1	KRONES hydrocare 1905		
Com	Comments The result of the applied calculation method according to the		

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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).

1	Acute inhalational toxicity
ļ	No data available

Skir	Skin corrosion/irritation			
No	No Product Name			
1	KRONES hydrocare 1905			
Comments pH >= 11,5		pH >= 11,5		
Evaluation		corrosive		

Seri	Serious eye damage/irritation			
No	No Product Name			
1	KRONES hydrocare 1905			
Com	nments	pH >= 11,5		
Evaluation		corrosive		

Res	Respiratory or skin sensitisation				
No	Substance name	CAS no.	EC no.		
1	potassium hydroxide	1310-58-3	215-181-3		
Rou	te of exposure	Skin			
Spe	cies	guinea pig			
Soul	rce	ECHA			
Eval	uation	non-sensitizing			
2	sodium hydroxide	1310-73-2	215-185-5		
Rou	te of exposure	Skin			
Species		Human			
Source		ECHA			
Evaluation		non-sensitizing			
Evaluation/classification		Based on available data, the classification criteria are not met.			

Geri	Germ cell mutagenicity				
No	Substance name	CAS no.	EC no.		
1	potassium hydroxide	1310-58-3	215-181-3		
Type of examination Ames-Test					
Spec	cies	Bacteria - Salmonella typhimurium	Bacteria - Salmonella typhimurium		
Source		ECHA	ECHA		
Eval	Evaluation/classification Based on available data, the classification criteria are not met.				

Reproduction toxicity	
No data available	

# Carcinogenicity No data available

STOT - single exposure	
No data available	

STOT - repeated exposure	
No data available	

Aspiration hazard	
No data available	

## 11.2 Information on other hazards

## **Endocrine disrupting properties**

No data available.

## Other information

No data available.

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## **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxi	Toxicity to fish (acute)				
No	Substance name	CAS no.		EC no.	
1	potassium hydroxide	1310-58-3		215-181-3	
LC5	0		80	mg/l	
Dura	ation of exposure		96	h	
Species		Gambusia affinis			
Source		ECHA			
Eval	uation/classification	Based on available data, the classification criteria are not met.			
2	tetrasodium-ethylenediaminetetraacetat	e 64-02-8		200-573-9	
LC5	0		121	mg/l	
Dura	ation of exposure		96	h	
Spe	cies	Lepomis macrochirus			
Soul	rce	ECHA			

## Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)				
No	Substance name	CAS no.		EC no.
1	sodium hydroxide	1310-73-2		215-185-5
EC50			40.4	mg/l
Duration of exposure			48	h
Species		Ceriodaphnia spec		
Source		ECHA		

## **Toxicity to Daphnia (chronic)**

No data available

## Toxicity to algae (acute)

No data available

## Toxicity to algae (chronic)

No data available

## **Bacteria toxicity**

No data available

## 12.2 Persistence and degradability

No data available.

## 12.3 Bioaccumulative potential

No data available.

## 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

No data available.

## 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

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#### **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 C5
Packing group II
Hazard identification no. 80
UN number UN3266

Proper shipping name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

Technical name potassium hydroxide sodium hydroxide

Tunnel restriction code E Label 8

#### 14.2 Transport IMDG

Class 8
Packing group II
UN number UN3266

Proper shipping name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

Technical name potassium hydroxide sodium hydroxide

EmS F-A, S-B Label 8

## 14.3 Transport ICAO-TI / IATA

Class 8
Packing group II
UN number UN3266

Proper shipping name Corrosive liquid, basic, inorganic, n.o.s.

Technical name potassium hydroxide sodium hydroxide

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

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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)

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure

## Creation of the safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

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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