EU safety data sheet

Trade name: KRONES hydrocare 2902

Current version : 1.0.3, issued: 08.06.2021 **Replaced version:** 1.0.2, issued: 26.02.2021 **Region:** GB

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

1.1 Product identifier

Trade name

KRONES hydrocare 2902

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

Relevant identified uses of the substance or mixture
Cleaning booster

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
Acute Tox. 4; H332
Eye Dam. 1; H318

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:
hydrogen peroxide solution

Hazard statement(s)

H302+H332	Harmful if swallowed or if inhaled
H318	Causes serious eye damage.

Precautionary statement(s)

P220	Keep away from clothing and other combustible materials.
P261	Avoid breathing mist/vapours/spray.
P280	Wear 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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**hydrogen peroxide solution**			
	7722-84-1 231-765-0 008-003-00-9 01-2119485845-22	Acute Tox. 4; H302 Acute Tox. 4; H332 Ox. Liq. 1; H271 Skin Corr. 1A; H314 Aquatic Chronic 3; H412 Eye Dam. 1; H318 STOT SE 3; H335	>= 25.00 - < 50.00	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	Eye Irrit. 2; H319: C >= 5% Eye Dam. 1; H318: C >= 8% Skin Irrit. 2; H315: C >= 35% STOT SE 3; H335: C >= 35% Skin Corr. 1B; H314: C >= 50% Ox. Liq. 2; H272: C >= 50% Aquatic Chronic 3; H412: C >= 63% Ox. Liq. 1; H271: C >= 70% Skin Corr. 1A; H314: C >= 70%	-	-

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)”.

3.3 Other information

Composition/information about the ingredients:
Ingredients according to the Detergents Regulation (648/2004/EC):
Biocidal active substances: 30 g hydrogen peroxide per 100 g product.

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. Adhere to personal

protective measures when giving first aid. If unconscious place in recovery position and seek medical advice.

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
When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

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. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
burns; Coughing; Eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically; With oral intake danger of aspiration due to foam formation, possible with larger amounts of gas embolism. In case of gas embolism lay flat immediately

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Extinguishing measures to suit surroundings. Water spray jet; Foam; Extinguishing powder; Carbon dioxide

Unsuitable extinguishing media
High power water jet; organic compounds

5.2 Special hazards arising from the substance or mixture

Oxidizing due to release of oxygen. Exposure to heat may cause bursting of the vessels.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Cool closed containers exposed to fire with water. 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 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. Prevent spread over a wide area (e.g. by containment or oil barriers).

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). Dilute with plenty of water.

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). Avoid eye, skin and clothing contact. Only qualified and trained persons are authorised to handle.

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. Provide eye wash fountain in work area.

Advice on protection against fire and explosion
Isolate from sources of heat, sparks and open flame. Keep away from sources of ignition - refrain from smoking. Take precautionary measures against static charges. No sparking tools should be used.

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. Protect from heat and direct sunlight.

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. Do not store together with: Alkalis; Reducing agents; combustible materials; Metal salts; organic solvents

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	**hydrogen peroxide solution**	**7722-84-1**		**231-765-0**	
	List of approved workplace exposure limits (WELs) / EH40				
	Hydrogen peroxide				
	WEL short-term (15 min reference period)	2.8	mg/m³	2	ppm
	WEL long-term (8-hr TWA reference period)	1.4	mg/m³	1	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**hydrogen peroxide solution**			**7722-84-1 231-765-0**	
	inhalative	Short term (acut)	local	3	mg/m³
	inhalative	Long term (chronic)	local	1.4	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**hydrogen peroxide solution**			**7722-84-1 231-765-0**	
	inhalative	Short term (acut)	local	1.93	mg/m³
	inhalative	Long term (chronic)	local	0.21	mg/m³

PNEC values

No	Substance name		CAS / EC no
	ecological compartment	Type	Value

1	**hydrogen peroxide solution**		**7722-84-1 231-765-0**	
	water	fresh water	0.0126	mg/L
	water	marine water	0.0126	mg/L
	water	fresh water sediment	0.047	mg/kg dry weight
	water	Aqua intermittent	1.38	mg/L
	soil	-	0.0019	mg/kg moist mass
	soil	-	0.0023	mg/kg dry weight
	sewage treatment plant	-	4.66	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	NO-P3		

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	Latex		
Material thickness	>=	0.5	mm
Breakthrough time	>=	480	min
Appropriate Material	chloroprene		
Material thickness	>=	0.5	mm
Breakthrough time	>=	480	min
Appropriate Material	NBR		
Material thickness	>=	0.35	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
Appropriate Material	viton		
Material thickness	>=	0.4	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/Colour
liquid
colourless

Odour
slightly pungent

pH value				
Value	2	-	5	

Boiling point / boiling range			
Value	>	100	°C

Melting point/freezing point				
Value	-13	-	133	°C

Decomposition temperature			
Value	appr.	113	°C

Flash point
No data available

Ignition temperature
No data available

Auto-ignition temperature	
Comments	Product is not selfigniting.

Explosive properties
Product does not present an explosion hazard.

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure			
Value	<	1	hPa
Reference temperature		30	°C

Relative vapour density
No data available

Relative density
No data available

Density				
Value	1.07	-	1.13	g/cm³
Reference temperature			20	°C

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	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**
log Pow		-1.57	
Source	ECHA		

Viscosity	
Value	1.80 mPa*s
Type	dynamic

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Oxidizing agents

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

10.3 Possibility of hazardous reactions
Reactions with flammable substances. Attacks organic substances as oxidizing agent. Reactions with reducing agents. Self-accelerating exothermic reaction under development of oxygen.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources. Static discharges.

10.5 Incompatible materials
Metals; Metal salts; Alkalis; Reducing agents; solvents; combustible materials

10.6 Hazardous decomposition products
Oxygen

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 hydrocare 2902**
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 oral > 2000 mg/kg).

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**
LD50	693.7		mg/kg bodyweight
Species	rat (female)		
with reference to	70% Solution		
Method	OECD 401		
Source	ECHA		

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**
LD50	> 2000		mg/kg bodyweight
Species	rabbit		
with reference to	35% Solution		
Method	OECD 402		
Source	ECHA		

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

No	Product Name
1	KRONES hydrocare 2902

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 data available

Skin corrosion/irritation

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

Species	rabbit
with reference to	70% solution
Method	OECD 404
Source	ECHA
Evaluation	corrosive

Serious eye damage/irritation

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

Species	rabbit
with reference to	10% Solution
Method	OECD 405
Source	ECHA
Evaluation	strongly irritant

Respiratory or skin sensitisation

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

Route of exposure	Skin
Source	ECHA
Evaluation	non-sensitizing

Germ cell mutagenicity

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

	2000	mg/l
Type of examination	Micronucleus test	
Species	mouse	
Method	OECD 474	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Reproduction toxicity

No data available

Carcinogenicity

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

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

STOT - single exposure

No	Substance name	CAS no.	EC no.
1	hydrogen peroxide solution	7722-84-1	231-765-0

	26	mg/kg bw/d
Duration of exposure	90	day(s)
Species	Mouse (male)	
with reference to	35% Solution	
Method	OECD 408	

Source	ECHA

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**

	2.9	mg/kg
Duration of exposure	28	day(s)
Species	rat	
Method	OECD 412	
Source	ECHA	

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	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**

LC50	16.4	mg/l
Duration of exposure	96	h
Species	Pimephales promelas	
Method	EPA	
Source	ECHA	

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**

EC50	2.4	mg/l
Duration of exposure	48	h
Species	Daphnia pulex	
Method	EPA	
Source	ECHA	

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**

ErC50	2.62	mg/l
Duration of exposure	72	h
Species	Skeletonema costatum	
Method	OECD 201	
Source	ECHA	

Toxicity to algae (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**

NOEC	0.63	mg/l
Duration of exposure	72	h
Species	Skeletonema costatum	
Method	OECD 201	

Source	ECHA

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**
Source		ECHA	
Evaluation		readily biodegradable	

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**hydrogen peroxide solution**	**7722-84-1**	**231-765-0**
log Pow		-1.57	
Source		ECHA	

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

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	5.1
Classification code	OC1
Packing group	II
Hazard identification no.	58
UN number	UN2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Tunnel restriction code	E
Label	5.1+8

14.2 Transport IMDG

Class	5.1
Subsidiary Risk	8

Packing group	II
UN number	UN2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
EmS	F-H, S-Q
Label	5.1+8

14.3 Transport ICAO-TI / IATA

Class	5.1
Subrisk	8
Packing group	II
UN number	UN2014
Proper shipping name	Hydrogen peroxide, aqueous solution
Label	5.1+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

A chemical safety assessment has been carried out for this mixture.

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)

H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
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.

Prod-ID 760660