

EU safety data sheet

Trade name: KRONES hydrocare RO 4000

Current version : 1.0.0, issued: 23.12.2021

Replaced version: -, issued: -

Region: GB

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

1.1 Product identifier

Trade name

KRONES hydrocare RO 4000

Substance name sodium metabisulphite
REACH registration no. 01-2119531326-45

Identification numbers

CAS no. 7681-57-4
EC no. 231-673-0
Index no. 016-063-00-2

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

Relevant identified uses of the substance or mixture

mineral salt

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

Eye Dam. 1; H318

Classification information

(*, **, ***, ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 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 and 4 of Annex I to CLP.

2.2 Label elements

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

Product identifier

7681-57-4 (sodium metabisulphite)

Hazard pictograms

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GHS05



GHS07

Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed.
H318 Causes serious eye damage.

Hazard statements (EU)

EUH031 Contact with acids liberates toxic gas.

Precautionary statement(s)

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P330 Rinse mouth.
P501 Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name sodium metabisulphite

Identification numbers

CAS no. 7681-57-4
EC no. 231-673-0
Index no. 016-063-00-2

Acute toxicity estimate (ATE) values

oral	dermal	inhalative
1540 mg/kg bodyweight		

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove soiled or soaked clothing immediately. In all cases of doubt, or when sickness symptoms persist, seek medical attention.

After inhalation

Ensure supply of fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid

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actions.

After skin contact

Wash with plenty of soap and water.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a doctor immediately.

After ingestion

Rinse mouth. Do not induce vomiting. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

Harmful if swallowed. Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

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

Container may burst in case of fire.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion byproducts. Do not allow run-off from fire fighting to enter drains or water courses. Collect contaminated fire extinguishing water separately and dispose of according to legal regulations. Fight fire with normal precautions from a reasonable distance. Co-ordinate firefighting measures to the fire surroundings. In case of combustion use a suitable breathing apparatus. Cool container with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ensure adequate ventilation. Wear appropriate protective gears to avoid breathing vapor and contact with skin, eyes or clothing. Do not inhale dust.

For emergency responders

Personal protective equipment (PPE) - see section 8. Breathing apparatus must be worn when exposed to the effects of vapors, dusts, aerosols and gases.

6.2 Environmental precautions

Do not allow to enter soil, waterways or waste water canal. Collect contaminated water / firefighting water separately. Knock down dust with water spray jet.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g., sand, kieselguhr, acid binder, universal binder, sawdust) and send for disposal. Ensure adequate ventilation.

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

Ensure adequate ventilation. Removal of dust deposits. Open and handle container with care. Dust deposits can

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accumulate on all deposit surfaces in an operating room.

General protective and hygiene measures

Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Do not inhale dust. Avoid contact with eyes. Use barrier skin cream. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed, cool and dry. Protect from heat and direct sunlight. Protect against humidity

Recommended storage temperature

Value 10 - 27 °C

Requirements for storage rooms and vessels

Keep only in the original container. Storage rooms must be properly ventilated.

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	sodium metabisulphite	7681-57-4	231-673-0
List of approved workplace exposure limits (WELs) / EH40			
	Disodium disulphite		
	WEL long-term (8-hr TWA reference period)	5	mg/m ³
2	sulphur dioxide	7446-09-5	231-195-2
	2017/164/EU		
	Sulphur dioxide		
	WEL short-term (15 min reference period)	2.7	mg/m ³ 1 ppm
	WEL long-term (8-hr TWA reference period)	1.3	mg/m ³ 0.5 ppm
List of approved workplace exposure limits (WELs) / EH40			
	Sulphur dioxide		
	WEL short-term (15 min reference period)	2.7	mg/m ³ 1 ppm
	WEL long-term (8-hr TWA reference period)	1.3	mg/m ³ 0.5 ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

A12 Values (Worker)				
No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	sodium metabisulphite			7681-57-4 231-673-0
	inhalative	Long term (chronic)	systemic	225 mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium metabisulphite			7681-57-4 231-673-0	
	oral	Long term (chronic)	systemic	8.6	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	66	mg/m³

PNEC values

PNEC values			
No	Substance name		CAS / EC no
	ecological compartment	Type	Value
1	sodium metabisulphite		7681-57-4 231-673-0
	water	fresh water	1 mg/L
	water	marine water	0.1 mg/L

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sewage treatment plant	-	75.4	mg/L
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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. Particulate filter device (EN 143).

Eye / face protection

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	chloroprene		
Material thickness		0.5	mm
Breakthrough time	>	480	min
Appropriate Material	NBR		
Material thickness	>=	0.35	
Breakthrough time	>	480	min
Appropriate Material	IIR: butyl rubber, isobutene-isoprene rubber		
Material thickness	>=	0.5	mm
Breakthrough time	>	480	min
Appropriate Material	IIR: butyl rubber, isobutene-isoprene rubber		
Material thickness	>=	0.5	mm
Breakthrough time	>	480	min

Other

Chemical-resistant work clothes.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Prevent penetration into the sewage system or into surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation			
solid			
Form/Colour			
crystalline			
white to yellowish			
Odour			
of sulphur dioxide			
pH value			
Value	3.5	-	5.5
Reference temperature		20	°C
Concentration		50	g/L
Source	Manufacturer		
Boiling point / boiling range			
No data available			

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Melting point/freezing point			
Value	>	120	°C
Decomposition temperature			
Value	>	150	°C
Source	ECHA		
Flash point			
No data available			
Ignition temperature			
No data available			
Oxidising properties			
The product does not have oxidizing properties.			
Explosive properties			
Product does not present an explosion hazard.			
Flammability			
not flammable			
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			
No data available			
Density			
Value		2.36	g/cm³
Reference temperature		20	°C
Source	Manufacturer		
Solubility in water			
Value		650	g/l
Reference temperature		20	°C
Source	Manufacturer		
Solubility			
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

This material is considered to be non-reactive under normal use conditions.

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10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

In contact with acid, emits toxic gases.

10.4 Conditions to avoid

Do not mix with acids. Protect from heat and direct sunlight. Protect against humidity.

10.5 Incompatible materials

Oxidizing agents; Toxic gases are released on contact with acids.

10.6 Hazardous decomposition products

None if stored, handled and transported properly.

SECTION 11: Toxicological information

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

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
LD50		1540	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
Evaluation/classification	On the basis of the available information, the classification criteria are not met.		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
LD50		> 2000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
Evaluation/classification	On the basis of the available information, the classification criteria are not met.		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
LC50		> 5.5	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	On the basis of the available information, the classification criteria are not met.		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
Species	rat		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	On the basis of the available information, the classification criteria are not met.		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.

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1	sodium metabisulphite	7681-57-4	231-673-0
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	strongly corrosive		
Evaluation/classification	Based on available data, the classification criteria are met.		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		On the basis of the available information, the classification criteria are not met.	

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No data available	

STOT - single exposure	
No data available	

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
Route of exposure		oral	
NOAEL		108	mg/kg bw/d
Species	rat		
Source	ECHA		
Evaluation/classification	On the basis of the available information, the classification criteria are not met.		

Aspiration hazard	
Based on available data, the classification criteria are not met.	

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	sodium metabisulphite	7681-57-4	231-673-0
LC50		> 215	- 463 mg/l
Duration of exposure			96 h
Species	Leuciscus idus		
Method	DIN 38 412, part L15		
Source	ECHA		

Toxicity to fish (chronic)			
No	Substance name	CAS no.	EC no.

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1	sodium metabisulphite	7681-57-4	231-673-0
NOEC	>=	316	mg/l
Duration of exposure		34	day(s)
Species	Danio rerio		
Method	OECD 210		
Source	ECHA		

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
EC50		89	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	79/831/EEC, appendix V, part C		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
NOEC	>	10	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	sodium metabisulphite	7681-57-4	231-673-0
EC50		43.8	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
NOEC	>	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	sodium metabisulphite	7681-57-4	231-673-0
Source	ECHA		
Evaluation/classification	The substance is an inorganic compound and is not subject to biodegradation.		

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	sodium metabisulphite	7681-57-4	231-673-0
Source	ECHA		
Evaluation/classification	Because of the highly anionic nature of the substance and its instability in aqueous media, bioaccumulation is unlikely and testing is not considered necessary.		

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12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be 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

No data available.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

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)

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON

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THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This substance is not subject to Part 1 or 2 of Annex I

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

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.

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.

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