

Trade name: KocFrei**Product no.:** 74035**Current version :** 1.0.0, issued: 21.12.2020**Replaced version: -**, issued: -**Region:** IE**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****KocFrei****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**Water treatment
deodorizer**Uses advised against**

No data available.

1.3 Details of the supplier of the safety data sheet**Address**Koch-Chemie GmbH
Einsteinstr. 42
D-59423 Unna

Telephone no. +49-2303-9 86 70-0

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Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

+353 1 809 2166 (National Poisons Information Centre)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Aquatic Acute 1; H400

Aquatic Chronic 2; H411

Eye Dam. 1; H318

Met. Corr. 1; H290

Skin Corr. 1B; H314

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS05



GHS09

Signal word

Danger

Hazardous component(s) to be indicated on label:

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sodium hypochlorite, solution

Hazard statement(s)

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H410 Very toxic to aquatic life with long lasting effects.

Hazard statements (EU)

EUH031 Contact with acids liberates toxic gas.

Precautionary statement(s)

P260 Do not breathe vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 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.
 P391 Collect spillage.
 P405 Store locked up.
 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**

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	sodium hypochlorite, solution			
	7681-52-9 231-668-3 017-011-00-1 01-2119488154-34	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH031	>= 10,00 - < 25,00	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)
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SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

Poisonous symptoms can first be observed after several hours, therefore medical observation for at least 48 hours is necessary. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

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. Irregular breathing/no breathing: artificial respiration.

After skin contact

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

After eye contact

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

After ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

No data available.

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

In the event of fire, the following can be released: Chlorine (Cl₂); Hydrogen chloride (HCl); Corrosive gases/vapours

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit. Run-off water from fire fighting must not be discharged into drains or enter surface water. Cool endangered containers with water spray jet.

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. Do not inhale 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. In case of entry into waterways, soil or drains, inform the responsible authorities.

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). Flush away residues with 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.

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.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep dry in a cool, well-ventilated place. Container should not be closed air-tight. Protect from heat and direct sunlight. Keep from freezing.

Recommended storage temperature

Value < 40 °C

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container.

Inappropriate material Metal

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****DNEL, DMEL and PNEC values****DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium hypochlorite, solution			7681-52-9 231-668-3	
	inhalative	Long term (chronic)	systemic	1,55	mg/m ³
	inhalative	Short term (acute)	systemic	3,1	mg/m ³
	inhalative	Long term (chronic)	local	1,55	mg/m ³
	inhalative	Short term (acute)	local	3,1	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	sodium hypochlorite, solution			7681-52-9 231-668-3	
	oral	Long term (chronic)	systemic	0,26	mg/kg/day

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inhalative	Long term (chronic)	systemic	1,55	mg/m ³
inhalative	Short term (acute)	systemic	3,1	mg/m ³
inhalative	Long term (chronic)	local	1,55	mg/m ³
inhalative	Short term (acute)	local	3,1	mg/m ³

PNEC values

No	Substance name	CAS / EC no
ecological compartment		Type
		Value
1	sodium hypochlorite, solution	7681-52-9 231-668-3
	water	fresh water
		0,21 µg/L
	water	marine water
		0,042 µg/L
	water	Aqua intermittent
		0,26 µg/L
	sewage treatment plant	-
		0,03 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

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

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

Appropriate Material	chloroprene		
Material thickness	>=	0,5	mm
Appropriate Material	Fluoro elastomer (FKM)		
Material thickness	>=	0,4	mm
Appropriate Material	NBR		
Material thickness	>=	0,35	
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
yellow; green

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Odour			
pungent; chlorine odour			
pH value			
Value	~	12	
Reference temperature		20	°C
Concentration		160	g/l
Boiling point / boiling range			
Value	102	- 110	°C
Melting point/freezing point			
No data available			
Decomposition temperature			
No data available			
Flash point			
No data available			
Ignition temperature			
No data available			
Oxidising properties			
not oxidizing			
Explosive properties			
The product does not have explosive properties.			
Flammability			
No data available			
Lower explosion limit			
No data available			
Upper explosion limit			
No data available			
Vapour pressure			
Value	20	mbar	
Reference temperature	20	°C	
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
Value	1,2	- 1,3	g/cm ³
Reference temperature		20	°C
Solubility in water			
Comments	Completely miscible		
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No data available			
Viscosity			
Value	3	- 4	mPa*s
Reference temperature		20	°C
Type	dynamic		

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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

Contact with acids liberates very toxic gas.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Keep from freezing. Protect from sun.

10.5 Incompatible materials

Acids; Reducing agents; Amines; Ammonia; methanol; Corrosive to metals.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

No data available

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitisation

No data available

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 data available

Aspiration hazard

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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 data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

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**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.

12.7 Other information

Other information

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Do not discharge into the drains or waters and do not store on public depositories.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

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

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	8
Classification code	C9
Packing group	II
Hazard identification no.	80
UN number	UN1791
Proper shipping name	HYPOCHLORITE SOLUTION
Tunnel restriction code	E
Label	8
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	8
Packing group	II
UN number	UN1791
Proper shipping name	HYPOCHLORITE SOLUTION
EmS	F-A, S-B
Marine Pollutant (according Index IMDG Code)	P
Label	8
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	8
Packing group	II
UN number	UN1791
Proper shipping name	Hypochlorite solution
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

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

This product is subject to Part I of Annex I, risk category:	E1
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REGULATION (EU) No 528/2012 concerning the making available on the market and use of biocidal products

Use biocides safely.
Always read the label and product information before use.
sodium hypochlorite 13,65 g/100 g

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.
Employment restrictions, according to the regulations for protection of expectant and nursing mothers and the youth health and safety regulations, serving to protect against hazardous materials, should be observed.

15.2 Chemical safety assessment

A chemical safety assessment has not 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)

H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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.

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