

SAFETY DATA SHEET

Klorit

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

1.1. Product identifier

Trade name

Klorit

Unique formula identifier (UFI)

EH90-H09J-U00X-G0JS

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

Relevant identified uses of the substance or mixture

PC8 Disinfection

Product code (A.I.S.E.)

Code

AISE-P314 / Surface disinfectant. Manual process.

AISE-P315 / Surface disinfectant. Spray and rinse manual process.

Use descriptors (REACH)

Sectors of use

Description

LCS "PW"

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category

Description

PC35

Washing and Cleaning Products (including solvent based products)

PC8

Biocidal Products (e.g. Disinfectants, pest control)

Environmental release category

Description

ERC8a

Wide dispersive indoor use of processing aids in open systems

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Multi-Services ApS

Stenderupvej 226

6092 Sønder Stenderup

Danmark

44228383

www.multi-services.dk

Contact person

Svend Olsen

E-mail

kunder@multi-services.dk

Revision

11/14/2022

SDS Version

1.0

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Eye Dam. 1; H318, Causes serious eye damage.
 Aquatic Acute 1; H400, Very toxic to aquatic life.
 Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Causes skin irritation. (H315)
 Causes serious eye damage. (H318)
 Very toxic to aquatic life with long lasting effects. (H410)

Safety statement(s)

General

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Prevention

Wear face protection/protective gloves/protective clothing. (P280)
 Wash hands and exposed skin thoroughly after handling. (P264)
 Avoid release to the environment. (P273)

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing. (P305+P351+P338)
 Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

Hazardous substances

sodium hypochlorite, solution % Cl active
 Silicid acid, sodium salt

Additional labelling

Active substance(s):
 sodium hypochlorite, solution % Cl active (4.21 g/100g)
 UFI: EH90-H09J-U00X-G0JS

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
sodium hypochlorite, solution % Cl active	CAS No.: 7681-52-9 EC No.: 231-668-3 REACH: 01-2119488154-34-xxxx Index No.: 017-011-00-1	3-5%	EUH031 Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411	
Silicid acid, sodium salt	CAS No.: 1344-09-8 EC No.: 215-687-4 REACH: 01-2119448725-31-0011 Index No.:	1-3%	Skin Irrit. 2, H315 Eye Dam. 1, H318 (SCL: 10.00 %) STOT SE 3, H335	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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Labelling of contents according to Detergents Regulation (EC) No 648/2004

< 5%

- Chlorine-based bleaching Agents

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water/water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds

Some metal oxides

Oxygen, hypochlorous acid, chlorine.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage temperature

6 - 35°C

Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

Strong acids

Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

sodium hypochlorite, solution % Cl active

Duration	Route of exposure	DNEL
Long term – Local effects - Workers	Inhalation	1,4 mg/m ³
Short term – Local effects - Workers	Inhalation	3 mg/m ³

PNEC

sodium hypochlorite, solution % Cl active

Route of exposure	Duration of Exposure	PNEC
Freshwater		0,0126 mg/l
Freshwater sediment		0,047 mg/l
Marine water		0,0126 mg/l
Marine water sediment		0,047 mg/l

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

8.3. Individual protection measures, such as personal protective equipment

Generally


Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
No special when used as intended.			


Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,38	> 240	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Face shield alternatively safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Clear

Odour / Odour threshold

Characteristic

pH

11,1

Density (g/cm³)

1.08

Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-Ignition (°C)

Testing not relevant or not possible due to the nature of the product.

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

Other information

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Contact with acids liberates toxic gas.

Reacts violently with alkali metals, metal powders, oxidizing materials and amines.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Protect from sunlight. Do not expose to temperatures exceeding 20 °C/68 °F.

10.5. Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

Strong acids

10.6. Hazardous decomposition products

Oxygen, hypochlorous acid, chlorine.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance sodium hypochlorite, solution % Cl active

Test method

Species Rat

Route of exposure Oral

Test LD50

Result 1100 mg/kg ·

Other information

Product/substance sodium hypochlorite, solution % Cl active

Test method

Species Rat

Route of exposure Dermal

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test	LD50
Result	> 2000 mg/kg ·
Other information	
Product/substance	sodium hypochlorite, solution % Cl active
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	> 10500 mg/kg ·
Other information	
Product/substance	Silicid acid, sodium salt
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	> 5000 mg/kg ·
Other information	
Product/substance	Silicid acid, sodium salt
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LD50
Result	1152 - 1349 mg/ kg ·
Other information	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	sodium hypochlorite, solution % Cl active
Test method	
Species	Fish
Compartment	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration	96 hours
Test	LC50
Result	0,06 mg/l ·
Other information	

Product/substance	sodium hypochlorite, solution % Cl active
Test method	
Species	Crustacean
Compartment	
Duration	48 hours
Test	EC50
Result	0,141 mg/l ·
Other information	

Product/substance	sodium hypochlorite, solution % Cl active
Test method	
Species	Algae
Compartment	
Duration	No data available.
Test	NOEC
Result	0,0021 mg/l ·
Other information	

Product/substance	Silicid acid, sodium salt
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	3185 mg/l ·
Other information	

Product/substance	Silicid acid, sodium salt
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	4857 mg/l ·
Other information	

Product/substance	Silicid acid, sodium salt
Test method	
Species	Algae
Compartment	
Duration	48 hours
Test	EC0
Result	>1000 mg/l ·
Other information	

12.2. Persistence and degradability

Product/substance	Silicid acid, sodium salt
Biodegradable	Yes
Test method	
Result	

12.3. Bioaccumulative potential

Product/substance	sodium hypochlorite, solution % Cl active
Test method	
Potential bioaccumulation	No
LogPow	-3,4200
BCF	No data available.
Other information	

Product/substance	Silicid acid, sodium salt
Test method	
Potential bioaccumulation	No
LogPow	No data available.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

BCF No data available.
Other information

12.4. Mobility in soil

sodium hypochlorite, solution % Cl active
LogKoc = 0.8679, High mobility potential.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 14 – Ecotoxic
Dispose of contents/container to an approved waste disposal plant.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

16 09 04* Oxidising substances, not otherwise specified

Waste group O:

Reactive waste





Specific labelling

Not applicable.


Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1791	HYPOCHLORITE SOLUTION	Class: 8 Labels: 8 Classification code: C9  	III	Yes	Limited quantities: 5 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1791	HYPOCHLORITE SOLUTION	Class: 8 Labels: 8 Classification code: C9  	III	Yes	Limited quantities: 5 L EmS: F-A S-B See below for additional information.
IATA	UN1791	HYPOCHLORITE	Class: 8	III	Yes	See below for

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
	SOLUTION	Labels: 8 Classification code: C9			additional information.
					

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

E1 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 100 tonnes / (upper-tier): 200 tonnes

Biocidal Products Regulations

Product type: PT2 - Disinfectants and algacides not intended for direct application to humans or animals

Restrictions on use:

-

Directions for use and dose rate:

-

Additional information:

-

Additional information

Not applicable.

Sources

The Danish Working Environment Authority's executive order no. 239 of 6 April 2005 on young people's work.

Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work.

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Executive Order no. 372 of 25 April 2016 on control of the risk of major accidents with dangerous substances.

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH031, Contact with acids liberates toxic gas.
 H290, May be corrosive to metals.
 H314, Causes severe skin burns and eye damage.
 H315, Causes skin irritation.
 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.

The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 PC35 = Washing and Cleaning Products (including solvent based products)
 PC8 = Biocidal Products (e.g. Disinfectants, pest control)
 ERC8a = Wide dispersive indoor use of processing aids in open systems

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CE = Conformité Européenne
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IARC = International Agency for Research on Cancer (IARC)
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SCL = A specific concentration limit
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVBC = Unknown or variable composition, complex reaction products or of biological materials
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).
 The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by alias

Other

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: DK-en