

RED LABEL HYPOCHLORITE

Code: 02AM1

Material Safety Data Sheet compliant with Regulation (EC) 2015/830

Version 6.0.0

Revision: 16/04/19

Print Date : 20/11/19

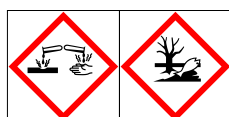
The mixture meets the classification criteria provided for under Regulation (EC) No 1272/2008.

Skin corrosion - Category 1B	H314: Causes severe skin burns and eye damage.
Serious damage to eyes - Category 1	H318: Causes serious eye damage.
Hazardous to the aquatic environment – Acute - Category 1	H400: Very toxic to aquatic life.
Hazardous to the aquatic environment – Chronic - Category 2	H411: Toxic to aquatic life with long lasting effects.
Substance corrosive to metals - Category 1	H290: May be corrosive to metals. EUH 031: Contact with acids liberates toxic gas.

2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :



Signal word :

Danger

Contains : Sodium hypochlorite

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. EUH 031: Contact with acids liberates toxic gas.

Precautionary statement(s) :

P260: Do not breathe dust/fume/gas/mist/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 or doctor/physician. P391: Collect spillage. P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

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2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable as this involves a mixture.

3.2. Mixtures

Chemical nature of the mixture : LIQUID CHLORINATED ALKALI

Substance(s)	CAS number(s)	EINECS number(s)	No registration REACH	Classification according to Regulation 1272/2008/EC	Type
5% <= Sodium hypochlorite < 15%	7681-52-9	231-668-3	Biocidal active substance, regarded as already registered	Met. Corr. 1 H290 Skin Corr. 1B H314 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M Factor (Acute) 10 M Factor (Chronic) 1	(1)
Sodium hydroxide<1%	1310-73-2	215-185-5	01-2119457892-27	Skin Corr. 1A H314 Met. Corr. 1 H290	(1) (2)

Type

- (1) : Substance classified as hazardous for health and/or the environment
 - (2) : Substance with an exposure limit at the work station.
- Substance of very high concern candidate for the authorisation procedure:
- (3) : Substance considered as PBT (persistent, bioaccumulable, toxic)
 - (4) : Substance considered as vPvB (very persistent, very bioaccumulable)
 - (5) : Substance considered as carcinogenic category 1A
 - (6) : Substance considered as carcinogenic category 1B
 - (7) : Substance considered as mutagenic category 1A
 - (8) : Substance considered as mutagenic category 1B
 - (9) : Substance considered as reprotoxic category 1A
 - (10) : Substance considered as reprotoxic category 1B
 - (11) : Substance considered as endocrine disrupter

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Full text of H- and EUH- phrases : see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General indications:

Take the contaminated clothes and shoes off immediately. Wash them before wearing them again.
In case of faintness , get medical advice/attention. Show this safety data sheet to the doctor.

In the event of inhalation :

Bring to fresh air.
Put into practice respiratory help procedure if needed and get medical advice immediately.

In the event of contact with the skin :

Take off immediately all contaminated clothing.
Wash immediately with plenty of water for 15 minutes at least.
Immediately call a POISON CENTER or doctor/physician.

In the event of contact with the eyes :

Rinse at once with a soft stream of water for at least 15 minutes, eyes wide open.
Remove contact lenses if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.

In the event of ingestion :

Rinse mouth.
Do NOT induce vomiting.
Send to hospital.

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

Skin contact : Corrosive : Causes severe burns.

Eye contact : Causes serious eye damage.

Ingestion : Causes severe burns in mouth and digestive tract.
Risk of perforating digestive tracts.

Inhalation : May cause a respiratory system irritation.

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

Treatments : Symptomatic treatment

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media :

Agents compatible with other products involved into fire.

Unsuitable extinguishing media :

None from our knowledge.

5.2. Special hazards arising from the substance or mixture

RED LABEL HYPOCHLORITE is non-flammable.

Risk hydrochloric emission of acid (HCl) in the event of fire.

Risk of chlorine emission in the event of fire.

5.3. Advice for firefighters

Wear independent respiratory equipment and protective suit.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel :

Evacuate non-essential staff and those not equipped with individual protection apparatus.

6.1.2. For emergency responders :

Evacuate the personnel to a safe location.

Keep people upwind and away from the location of the flow/leak.

Use personal protection equipment.

6.2. Environmental precautions

Intervention limited to trained staff.

Do not discharge the product directly to sewer or to environment.

Take as soon as possible all incompatible materials away.

6.3. Methods and material for containment and cleaning up

Small spillage :

Pump in a reservoir of help.

Large spillage :

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Never return spills in original containers for re-use.
Keep in suitable, properly labelled and closed containers for disposal.
Mark out, soak up with an inert absorbant and pump in an emergency tank.

6.4. Reference to other sections

Respect protective measures presented at heading 8.
Refer to section 13 for the elimination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not breathe vapour.
Avoid contact with skin, eyes and clothing.
Do not breathe spray.
Do not eat, drink or smoke in work area. Avoid projections during use.
Do not mix with an acid.
Take off immediately all contaminated clothing.
Operate in a well ventilated place.
Do not mix with reducing agents.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

Keep only in the original container.
Keep container closed.
Keep in a cool place.
Keep away from products sensitive to chlorinated alkalis.

7.2.2. Packaging or wrapping materials :

High density polyethylene recommended.

7.3. Specific end use(s)

RED LABEL HYPOCHLORITE is for use as a biocide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values :

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Substance	Country	Type	Value	Unit	Comments	source
Chlorine	GBR	OEL Short term	0,5	ppm		International limit values for chemical agents
			1,5	mg/m ³		International limit values for chemical agents
Nitrogen trichloride	FRA	VLCT Short term	1,5	mg/m ³	Valeur limite de confort déterminée par l'INRS	
		VLEP 8h	0,8	mg/m ³	Valeur limite de confort déterminée par l'INRS	
Sodium hydroxide	GBR	OEL Short term	2	mg/m ³		International limit values for chemical agents

8.2. Exposure controls

According to the requirements of Directive 98/24 /EC, the employer is required to conduct a risk assessment and implement appropriate risks management measures.

* For any situation where the absence of risk is not proven, he must consider the substitution or reduction of risk by improving in priority processes used and collective protection measures. The effectiveness of the solutions implemented will be checked by measurement in comparison to the statutory limit values for substances defined in Section 8.1.

* If the risk remains after these corrective actions, he must always check by routinely measuring compliance with regulatory OEL if they exist in section 8.1 and apply all the individual protective measures given in section 8.2.

* When formalized risk assessment indicates a low risk to workers' health, control of compliance with regulatory OEL may not be considered and all individual protection measures is not always mandatory.

8.2.1. Appropriate engineering controls :

Ensure adequate ventilation.

Apply the necessary technical measures to comply with the professional exposure limit values.

8.2.2. Individual protection measures, such as personal protective equipment :

Eye/face protection :

Use safety glasses or facial screen in conformity with the EN 166 standard.



Hand protection :

Use chemical resistant gloves approved to EN 374.

Examples of preferred materials for insulating gloves:

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Butyl rubber.

Nitril.

Neoprene.



Skin protection :

Wear boots and a protective cloth with chemical resistance.



Respiratory protection :

During handling operations that cause vapours to form, wear a full mask compliant with standard EN 136 fitted with a filter (compliant with standard EN 141 or EN 14387) of type:

B: Inorganic gases and vapors.

During applications that cause aerosols to form, wear a half-mask in compliance with the European standard EN 140 or a complete mask in conformity with the European standard EN 136 equipped with a filter (in conformity with the European standard EN 143) of the following type:

P2: Particles, solid aerosols and liquids

It is possible to combine the anti-vapor filters and anti-aerosols.



Thermal hazards :

Not applicable

Health measures :

Safety shower and eye wash fountain near to workplace.

After using, wash systematically all personal protective equipment.

8.2.3. Environmental exposure controls :

Do not discharge the product directly to sewer or to environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Appearance	Clear liquid
Colour	Yellow
Odour	Not available
Odour threshold	Not available
Pure pH	13.5
pH value at 10g/l	Not available
Freezing point :	Not available
Boiling point	> 100 °C
Flash point	Not applicable
Evaporation rate:	Not available
Flammability	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Mass density	1.17 g/cm ³
Relative density	1.17
Solubility in water	Soluble in water in all proportions
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

No additional information.

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazards linked to exothermal reactions.

10.2. Chemical stability

Stable in the recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Exothermic reactions with acids.

10.4. Conditions to avoid

Light, heat.

10.5. Incompatible materials

Acids.

Metals.

Reducing agents.

10.6. Hazardous decomposition products

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Risk hydrochloric emission of acid (HCl) in the event of fire.

Risk of chlorine emission in the event of fire.

Contact with acids liberates gaseous chlorine.

In the presence of metals, risk of emission of oxygen.

These data are given for the concentrated mixture. The use of the mixture under its diluted form must be performed in conformity with data given by the technical data sheet and the technical adviser.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance-related data:

Acute toxicity

Sodium hypochlorite : LD 50 - oral rat > 2,000 mg/kg. - solutions, 12%< active chlorine<16% - MSDS supplier

Sodium hypochlorite : LD 50 - dermal rabbit > 2,000 mg/kg. - solutions, 12%< active chlorine<16% - MSDS supplier

Sodium hydroxide : LD 50 - dermal rat 1,350 mg/kg. - MSDS supplier

Skin corrosion/irritation

Sodium hydroxide (50%) : Cutaneous contact rat . Corrosive to the skin - MSDS supplier

Sodium hydroxide + Sodium hypochlorite : Skin irritation . Corrosive. - MSDS supplier

Serious damage to eyes/eye irritation

Sodium hydroxide (50%) : Eye contact : . corrosive to the eyes - MSDS supplier

Sodium hydroxide + Sodium hypochlorite : Eye irritation . Corrosive. - MSDS supplier

Respiratory tracts irritation

Sodium hydroxide (50%) : Respiratory tracts irritation . Fog inhalation is irritant for respiratory tract - MSDS supplier

Mutagenicity

Sodium hydroxide : . Not mutagenic - MSDS supplier

Carcinogenicity

Sodium hydroxide : mouse . Not carcinogenic - MSDS supplier

Mix-related data: :

Acute toxicity

. Not determined

Skin corrosion/irritation

Skin corrosivity . The mixture should be considered as corrosive because of its extreme pH.

Serious damage to eyes/eye irritation

Ocular corrosivity . Causes serious eye damage according to the criteria of Regulation 1272/2008/EC.

Eye irritation . Serious damage to eyes

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Respiratory / skin sensitisation

Skin sensitisation . The mixture is not considered as a skin sensitiser according to 1272/2008/EC Regulation.

Respiratory sensitisation . The mixture is not considered as a respiratory sensitiser according to 1272/2008/EC Regulation.

Mutagenicity

. The classification criteria are not met given the available data.

Carcinogenicity

. The classification criteria are not met given the available data.

Reproductive toxicity

. The classification criteria are not met given the available data.

Specific target organ toxicity - single exposure

. The classification criteria are not met given the available data.

Specific target organ toxicity - repeated exposure

. The classification criteria are not met given the available data.

Aspiration hazard

. The classification criteria are not met given the available data.

Most important symptoms and effects, both acute and delayed :

Skin contact : Corrosive : Causes severe burns.

Eye contact : Causes serious eye damage.

Ingestion : Causes severe burns in mouth and digestive tract.
Risk of perforating digestive tracts.

Inhalation : May cause a respiratory system irritation.

SECTION 12: Ecological information

12.1. à 12.4. Toxicity - Persistence and degradability - Bioaccumulative potential - Mobility in soil

Substance-related data:

Acute toxicity

Sodium hydroxide : LC 50 - 96 h fishes (Gambusia affinis) 35 - 189 mg/L. - MSDS supplier

Sodium hypochlorite : EC 50 - 48h Aquatic invertebrates 0.01 - 0.1 mg/L. - solutions, 12%< active chlorine<16% - MSDS supplier

Degradability

Sodium hydroxide (50%) : Biodegradability aerobic . Not applicable - MSDS supplier

Sodium hydroxide (50%) : Biodegradability anaerobic . Not applicable - MSDS supplier

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Sodium hydroxide (50%) : Half life air 13 seconds. Degradation product = sodium carbonate - MSDS supplier
Sodium hydroxide (50%) : water. . Instantaneous ionization; Degradation products : salts - MSDS supplier
Sodium hydroxide (50%) : soil . Ionization / neutralization - MSDS supplier

Bioaccumulation

Sodium hydroxide (50%) : . Not applicable - MSDS supplier

Mobility

Sodium hydroxide (50%) : air . Instantaneous degradation - MSDS supplier
Sodium hydroxide (50%) : water. . Important solubility and mobility - MSDS supplier
Sodium hydroxide (50%) : soil/sediments . Important solubility and mobility; Contamination of ground water in case of rain - MSDS supplier

Mix-related data:

Acute toxicity

fishes . Not determined
daphnia . Not determined
algae . Not determined

Chronic toxicity

. No data available.

Degradability

. No data available.

Bioaccumulation

. No data available.

Mobility

. No data available.

Conclusion :

The mixture is considered to be dangerous for the environment according to 1272/2008/EC Regulation.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.6. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Treatment of the mixture :

Do not discharge the product directly to sewer or to environment.

Comply with Directive 2008/98/EC of 19/11/2008 amended, relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2014/955/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

Packaging treatment :

Rinse thoroughly the packaging with water and treat the effluent like wastes.

Comply with Directive 2008/98/EC of 19/11/2008 amended, relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2014/955/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

SECTION 14: Transport information

ROAD TRANSPORT:

Rail/Route (RID/ADR)

UN no : 1791

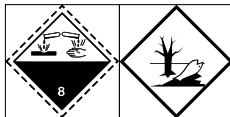
UN proper shipping name :HYPOCHLORITE SOLUTION (Sodium hydroxide+Sodium hypochlorite)

Transport hazard class(es) : 8

Packing group : III

Hazard code : 80

Label : 8



Tunnel code : E

Environmental hazard : Yes (Sodium hypochlorite)

Special precautions for user : No information.

Limited Quantity (QL): 5L

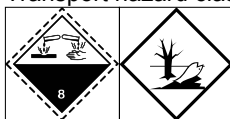
MARITIME TRANSPORT :

IMDG

UN no :1791

UN proper shipping name : HYPOCHLORITE SOLUTION (Sodium hydroxide+Sodium hypochlorite)

Transport hazard class(es) : 8



Packing group : III

Marine pollutant : Yes (Sodium hypochlorite)

Special precautions for user : No information.

EmS number : F-A, S-B

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Limited Quantity (QL): 5L

Transport in bulk according to Annex II of MARPOL and the IBC Code :

Not concerned

SECTION 15: Regulatory information

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

Regulations relating to the hazards from major accidents :

SEVESO 3 Directive (2012/18/EC) : E1

Regulations relating to the classification, packing and labelling of substances and mixes :

Regulation 1272/2008/EC amended.

Waste regulations :

2008/98/EC Directive amended by 2015/1127/EC Directive - Regulation 1357/2014/EC

Decision 2014/955/EC which establishes the list of hazardous waste.

Protection of workers :

Directive 98/24/EC of 07/04/1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation 850/2004/EC on persistent organic pollutants and modifying Directive 79/117/EC : Not applicable

Regulation 1005/2009/EC amended on substances that deplete the ozone layer : Not applicable

Regulation (EC) 648/2004 :

Not concerned

Comply with national and local legislation.

15.2. Chemical safety assessment

No

SECTION 16: Other information

The safety data sheet is additional to the technical data sheet but does not replace it. The information given here in is to the best of our knowledge correct and is given in good faith. We must also draw the user's attention on potential risks of the product is used for other purposes for which the product is known.

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In no way does it exempt users from being aware of and complying with regulations applicable to their activity. It is their sole responsibility to take all necessary precautions in accordance to the usage of the product they are aware of.

Regulations are only stated in order to help users fulfill the duties involved in the use of the product.

This description should not be considered as exhaustive. It does not exempt users from ensuring if other demands need to be complied with-according to other laws than the ones hereby stated and applicable to holding and usage of the product-demands for which they will remain sole responsibility.

Section(s) modified compared with the previous version :

Not concerned

List of H phrases referred to in sections 2 and 3 :

H290 : May be corrosive to metals.

H314 : Causes severe skin burns and eye damage.

H335 : May cause respiratory irritation.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Sources of key data used to compile the data sheet :

MSDS supplier

International limit values for chemical agents

Historical :

Version 6.0.0

Cancels and replaces previous version .