

ALKLOR SB

Code: 06047

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

Version 6.1.0

Revision: 09/01/17

Print Date : 01/11/19

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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.

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.

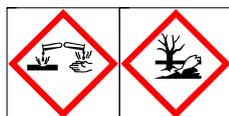
Serious damage to eyes - Category 1

H318: Causes serious eye damage.

2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :



Signal word :

Danger

Contains : Sodium hydroxide+ 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) :

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.

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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.

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 hydroxide < 15%	1310-73-2	215-185-5	01-2119457892-27	Eye Irrit. 2 H319 Met. Corr. 1 H290	(1)
5% <= Sodium hypochlorite < 10%	7681-52-9	231-668-3	01-2119488154-34	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)

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

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(10) : Substance considered as reprotoxic category 1B

(11) : Substance considered as endocrine disrupter

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

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Treatments : Symptomatic treatment

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

ALKLOR SB is non-flammable.

However, in contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.

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.

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Large spillage :

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 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.

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)

No other recommendation.

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	EU	OEL Short term	0,5	ppm	Indicative Occupational Exposure Limit Value	International limit values for chemical agents
			1,5	mg/m ³	Indicative Occupational Exposure Limit Value	International limit values for chemical agents
Sodium hydroxide	FRA	VLCT	2	mg/m ³		MSDS supplier
		VLEP 8h	2	mg/m ³	Valeur limite indicative	International limit values for chemical agents
		EMV (Exposure medium value) :	2	mg/m ³		INRS
			ppm		INRS	
	AUT	OEL 8h	2 inhalable aerosol	mg/m ³		International limit values for chemical agents
		OEL Short term	4 inhalable aerosol	mg/m ³		International limit values for chemical agents
	BEL	OEL 8h	2	mg/m ³	M	International limit values for chemical agents
	CHE	OEL 8h	2 inhalable aerosol	mg/m ³		International limit values for chemical agents
		OEL Short term	2 inhalable aerosol	mg/m ³		International limit values for chemical agents
	DNK	OEL 8h	2	mg/m ³		International limit values for chemical agents
		OEL Short term	2	mg/m ³		International limit values for chemical agents
	ESP	OEL 8h	2	mg/m ³		International limit values for chemical agents
	GBR	OEL Short term	2	mg/m ³		International limit values for chemical agents
	SWE	OEL 8h	1	mg/m ³	Inhalable dust	International limit values for chemical agents
	POL	NDS 8h	0,5	mg/m ³		International limit values for chemical agents
		NDSCh Short term	1	mg/m ³		International limit values for chemical agents
		STEL	1	mg/m ³		MSDS supplier
		TWA	0,5	mg/m ³		MSDS supplier
	HUN	OEL 8h	2	mg/m ³		International limit values for chemical agents
		OEL Short term	2	mg/m ³		International limit values for chemical agents
	LVA	EMV (Exposure medium value) : 8h	0.5	mg/m ³		
	SVN	OEL	2	mg/m ³	opomba: Y	Rules on the protection of workers against the risks related to exposure to chemicals at work in Slovenia (Official Gazette RS, št 100/01, 39/05, 53/07, 102/10, 43/11. ZVZD-1 in 38/15)
		STEL	1		opomba: Y	Rules on the protection of workers against the risks related to exposure to chemicals at work in Slovenia (Official Gazette RS, št 100/01, 39/05, 53/07, 102/10, 43/11. ZVZD-1 in 38/15)
HRV	OEL Short term	2	mg/m ³			

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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:

Butyl rubber.

Nitril.

Neoprene.

PVC

Do not wear polyvinyl alcohol (PVA) gloves.



Skin protection :

Wear boots and a protective cloth with chemical resistance.



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Respiratory protection :

None under normal conditions of use.

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

Appearance	Clear liquid
Colour	Yellow
Odour	Chlorinated
Odour threshold	Not available
Pure pH	Not available
pH value at 10g/l	12.4±0.2
Freezing point :	-20 °C
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	1.2±0.01 g/cm ³
Relative density	1.2±0.01
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

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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

Light metals and/or colored.
Acids.

10.6. Hazardous decomposition products

Contact with acids liberates gaseous chlorine.
In contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.

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

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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.

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.

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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

Chronic toxicity

Sodium hypochlorite : NOEC - 7days algae 0.002,1 mg/L. - MSDS supplier

Degradability

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

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

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

EC 50 - 48h daphnia (Daphnia magna) (OECD 202): 0.93 mg/L.

algae . Not determined

Chronic toxicity

. No data available.

Degradability

. The surface agents contained in this mix are in line with the requirements of the Detergent Regulation 648/2004/EC.

Bioaccumulation

. No data available.

Mobility

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. 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

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 : 1719

UN proper shipping name :CAUSTIC ALKALINE LIQUID, N.O.S. (Sodium hydroxide+Sodium hypochlorite)

Transport hazard class(es) : 8

Packing group : II

Hazard code : 80

Label : 8



Tunnel code : E

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Environmental hazard : Yes (Sodium hypochlorite)

Special precautions for user : No information.

Limited Quantity (QL): 1L

MARITIME TRANSPORT :

IMDG

UN no :1719

UN proper shipping name : CAUSTIC ALKALINE LIQUID, N.O.S. (Sodium hydroxide+Sodium hypochlorite)

Transport hazard class(es) : 8



Packing group : II

Marine pollutant : Yes (Sodium hypochlorite)

Special precautions for user : No information.

EmS number : F-A, S-B

Limited Quantity (QL): 1L

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

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Regulation (EC) 648/2004 :

In conformity with the regulation in force on detergents: Regulation (EC) N° 648/2004.

Ingredient datasheet for the medical staff is available upon written request.

Contains :

5-15% Chlorine-based bleaching agents

< 5% Phosphonates, Polycarboxylates

Disinfectants

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.

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 :

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

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.

H319 : Causes serious eye irritation.

H335 : May cause respiratory irritation.

H400 : Very toxic to aquatic life.

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

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Sources of key data used to compile the data sheet :

MSDS supplier

Historical :

Version 6.1.0

Cancels and replaces previous version 6.0.4