



Chemipro® Caustic

1. Identification of the substance or the mixture and of the company/business

1.1. Product identification

Product name:Chemipro CausticProduct use:Cleaner.The product is intended solely for professional use.

1.2. Relevant identified use of the substance or the mixture and discouraged use

Recommended use: Cleaner for the food industry. Cleaning in a partially closed system.

Discouraged use: None known.

1.3. Details of the supplier of the Material Safety Datasheet

Company identification: See footnote in the Material Safety Datasheet.

1.4. Telephone number for emergency situations

Telephone number in the event of an emergency: +32(0)70/245.245 (Poison Control Centre)

2. Hazards identification

2.1. Classification of the substance or mixture

Product description: Mixture

Classification in accordance with regulation (EC) no. 1272/2008 [CLP/GHS]

Skin Corr. 1A, H314 Aquatic Chronic 2, H411

Classification in accordance with directive 1999/45/EG [Dangerous Preparations Directive]

According to directive 1999/45/EG and its amendments, the product has been classified as hazardous. **Classification:** Xi; R37

Risks to health:	R31 N; R51/53 Causes serious burns. Irritating to the respiratory system. Contact with acids liberates toxic gas.
Environmental hazards:	Toxic to aquatic life; can cause long-lasting hazardous effects in the aquatic environment.



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See section 16 for the full text of the R or H phrases that are mentioned above. See section 11 for more information about health effects and symptoms.

Hazard

Sodium hydroxide

2.2. Labeling elements Hazard symbols:



Sign word: Contains: Description of hazard:

<u>Precautionary measures:</u> Prevention:

Reaction:

H314 - Causes severe skin burns and eye damage.
H411 - Toxic to aquatic life with long lasting effects.
P260 - Do not inhale substance.
P273 - Prevent release to the environment.
P280 - Wear protective gloves and eye/face protection.
P303 + P361 + P353 - IN THE EVENT OF CONTACT WITH SKIN (or hair): Immediately remove all contaminated clothing. Rinse the skin with water or take a shower.
P305 + P351 + P338 - IN THE EVENT OF CONTACT WITH THE EYES: Carefully rinse with water for several minutes. Remove contact lenses, if possible.
Continue rinsing.
P310 - Consult a physician or POISON CONTROL CENTRE immediately.

2.3. Other hazards			
Other hazards that do not			
result in classification:			

When handling and/or processing this material, particles may be produced that cause mechanical irritation of the eyes, skin, nose and throat.



3. Composition and information about ingredients

Product ingredient name	Identification options	%	Classification 67/548/EEC	Regulation (EC) no. 1272/2008 [CLP]	Туре
Sodium hydroxide	REACH #: 01- 2119457892-27 EC: 215-185-5 CAS no. 1310- 73-2 Index: 011- 002-00-6	25-35	C; R35	Skin Corr. 1A, H314	[1] [2]
Sodium metasilicate	REACH #: 01- 2119449811-37 EC: 229-912-9 CAS no. 6834- 92-0 Index: 014- 010-00-8	10-20	C; R34 Xi; R37	Acute Tox. 4, H302 Skin Corr. 1B, H314 STOT SE 3, H335	[1]
Troclosene sodium, dihydrate	REACH #: 01- 2119489371-33 EC: 220-767-7 CAS no. 51580- 86-0 Index: 613- 030-00-X	2.5-10	E; R2 O; R8 Xn; R22 Xi; R35/37 R31 N; R50/53	Ox. Sol. 2, H272 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	REACH #: 01- 2119489428-22 EC: 270-115-0 CAS no. 68411- 30-3	1-3	Xn; R22 Xi; R41, R38	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1]
Aliphatic hydrocarbons	REACH #: 01- 2119487078-27 EC: 232-455-8 CAS no. 8042- 47-5	1-5	Not classified.	Asp. Tox. 1, H304	[1] [2]
			See section 16 for the full text of the R phrases that are mentioned above.	See section 16 for the full text of the H phrases that are mentioned above.	



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There are no additional ingredients which, as far as is known to the supplier and in the applicable concentrations, have been classified as hazardous to the health or to the environment and which would have to be listed in this section due to this.

Type:

[1] Substance classified with a health or environmental hazard

[2] Substance with an occupational exposure limit

[3] Substance complies with criteria for PBT in accordance with Regulation (EC) no. 1907/2006, Appendix XIII

[4] Substance complies with criteria for vPvB in accordance with Regulation (EC) no. 1907/2006, Appendix XIII

Exposure limits related to work hygiene, if available, are listed in section 8.

4. First aid measures

4.1. Description of the first aid measures.

- Eye contact:	Rinse the eyes immediately with large quantities of water, lifting the upper and lower eyelids from time to time. Check for contacts and remove them, if found. Rinse for at least 15 minutes. Burns caused by chemicals must be treated immediately by a physician. Consult a physician immediately. Consult a poison control centre or a physician immediately.
- Inhalation:	Expose the victim to fresh air and have him/her rest in a position that makes breathing easier. If the patient is not breathing, is breathing irregularly, or if respiratory arrest occurs, artificial respiration or oxygen must be administered by trained personnel. Place the patient in a stable side position and call medical help immediately if the person is unconscious. Ensure that the airways remain clear. Loosen tight-fitting clothing, such as a shirt collar, tie or belt. After inhalation of breakdown products in the event of a fire, symptoms may occur with a delay. Consult a physician immediately. Consult a poison control centre or a physician immediately.
- Skin contact:	Rinse contaminated skin with a large quantity of water. Remove contaminated clothing and shoes. Rinse for at least 15 minutes. Burns caused by chemicals must be treated immediately by a physician. Wash contaminated clothing before reusing. Clean shoes thoroughly before reuse. Consult a physician immediately. Consult a poison control centre or a physician immediately.
- Ingestion:	Rinse the mouth with plenty of water. Remove dentures, if applicable. If the victim has ingested the material and is conscious, allow the victim to drink small quantities of water. Stop giving water



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if the victim becomes nauseated, because vomiting is likely. Do not induce vomiting unless medical personnel has indicated that this is necessary. If the person needs to vomit, hold the head low to prevent vomit from entering the lungs. Burns caused by chemicals must be treated immediately by a physician. Never administer anything by mouth to an unconscious person. Place the patient in a stable side position and call medical help immediately if the person is unconscious. Ensure that the airways remain clear. Loosen tightfitting clothing, such as a shirt collar, tie or belt. Expose the victim to fresh air and have him/her rest in a position that makes breathing easier. Consult a physician immediately. Consult a poison control centre or a physician immediately.

- Protection of first aid responders:

No action may be undertaken if there is a chance of personal accidents or in the case of insufficient training. Wash contaminated clothes with water before you take them off or wear gloves.

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

Possible acute consequences to health:

Inhalation:	Can emit gases, steam or dust that are very irritating or corrosive
	for the airways. Exposure to decomposition products can be
	hazardous to the health. After exposure, serious consequences can
	occur with a delay.
Ingestion:	May cause burns to the mouth, throat and stomach.
Skin contact:	Causes serious burns.
Eye contact:	Causes serious eye injury.

Signs/symptoms of excessive exposure

Inhalation:	Adverse effects can be the following:
	Irritation of the airways; coughing
Ingestion:	Adverse effects can be the following:
	stomach ache
Skin contact:	Adverse effects can be the following:
	pain or irritation; redness; blistering can occur
Eye contact:	Adverse effects can be the following:
	pain, tears, redness

4.3. Reporting of required immediate medical attention and special treatment needed

Comments for the physician: After inhalation of breakdown products in the event of a fire, symptoms may occur with a delay. Specific treatments: No specific treatment.



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5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Unsuitable extinguishing media:

In the event of fire, use water mist, foam, dry chemical dust or carbon dioxide gas None known.

5.2. Special hazards arising from the substance or mixture

Risk of the substance or	
mixture:	Fine dust clouds may form explosive mixtures with air. This dust is toxic to the aquatic environment with long-lasting consequences. Extinguishing water that has been contaminated with this material must be collected so that it does not wind up in the surface water, sewer or drain.
Hazardous	
combustion products:	Decomposition products can include the following: Carbon dioxide Carbon monoxide Nitrogen oxides Phosphorus oxides Halogenated connections
	Metal oxide(s)

5.3. Advice for fire brigade members

Special precautionary measures
for fire fighters:In the event of a fire, immediately isolate the terrain by removing
all persons away from the vicinity of the incident. No action may be
undertaken if there is a chance of personal accidents or in the case
of insufficient training. Remove the reservoirs from the fire area if
this is possible without risk. Use water mist to keep containers that
are exposed to the fire cool.Special protective equipment
for fire brigade members:Fire fighters must wear suitable clothing and carry an independent
self-contained breathing apparatus (SCBA) that has a full face
piece.

6. Measures to take in the event of accidental release of the substance or mixture

6.1. Personal precautions, protective equipment and emergency procedures

For persons other than emergency services:

No action may be undertaken if there is a chance of personal accidents or in the case of insufficient training. Ensure that unprotected and superfluous personnel does not enter. Try to





prevent touching the spilled material or walking through it. Shut off all sources of ignition. No open flame or smoking in the hazardous area. Do not inhale the substance. Ensure adequate ventilation Wear a suitable respiratory mask in the event of insufficient ventilation. Wear suitable personal protective equipment.

For emergency services: If special clothing is required for handling the spilled product, please also read the information in section 8 about suitable and unsuitable materials. See also the information under the heading "For persons other than emergency services".

6.2. Environmental precautionary measures

Measures for protecting the environment:

Prevent dispersion of spilled material and waste material and prevent this from coming into contact with the soil, waterways, drain pipes and sewer. Inform the respective authorities if the product has contaminated the environment (sewer, waterways, soil or air). Water-polluting material. This product can be hazardous to the environment if it is released in large quantities. Clean up the leaked/spilled substance.

6.3. Methods and material for containment and clean-up

Light spills:Remove packages from the spill area. Vacuum or sweep up the
material and place it into the appropriate waste bin with label.Large spills:Remove packages from the spill area. Approach the spill with your
back to the wind. Prevent access to sewers, waterways, basements
or closed areas. Vacuum or sweep up the material and place it into
the appropriate waste bin with a label. Ensure that no dusty
conditions occur and prevent spreading by the wind.

6.4. Reference to other sections

See section 1 for contact information for emergencies.

See section 8 for information about suitable personal protective equipment. See section 13 for more information about waste management.





7. Handling and storage

The information in this section contains general advice and guidelines. The list of recommended uses in section 1 must be consulted for any available use-specific information that is provided in the exposure scenario(s).

tions for onfo handling of the sub-

	ling of the substance or mixture
Protective measures: Wear	suitable personal protective equipment (see section 8). Ensure that the product does not come into contact with the skin or clothing. Do not inhale the substance. Do not ingest. Prevent release in the environment. Prevent dust formation during handling and prevent all possible sources of ignition (sparks and flames). Prevent accumulation of dust particles. Only use in the event of sufficient ventilation. Wear a suitable respiratory mask in the event of insufficient ventilation. Store in its original packaging, or in an approved alternative that is not made of compatible material; keep tightly closed if not in use.
Recommendations regarding gene	
work hygiene:	Employees must wash their hands and face before eating, drinking and smoking. See also section 8 for additional information about hygienic measures.
7.2. Conditions for safe storag Conditions for safe storage, including	e, including incompatible products
incompatible products:	Store between the following temperatures: 0 to 30°C (32 to 86 °F). Dispose of in accordance with local regulations. Store in a separate, approved area. Store in its original packaging, protected from direct sunlight, in a dry, cool, well-ventilated location, away from material with which contact should be avoided (see section 10) and food and drink. Remove all sources of ignition. Keep separated from oxidative substances. Keep the packaging properly closed and sealed until use. Opened packages do need to be carefully resealed and should be stored upright in order to prevent leaking. Do not store in the packaging without a label. Take suitable measures to prevent release in the environment.
7.3. Specific end-uses Recommendations:	Not applicable until the exposure scenarios for substances
Solutions specific for the industrial sector:	are available.
	Not applicable until the exposure scenarios for substances are available.



8. Measures to control exposure/personal protection

8.1. Control parameters

Occupational exposure limits			
Product/ingredient name	Exposure limits		
Sodium hydroxide	List of Limits (Belgium, 6/2009).		
	CEIL: 2 mg/m ³		
Aliphatic hydrocarbons	List of Limits (Belgium, 6/2009).		
	Limit: 5 mg/m ³ 8 hours. Form: mist		
	Short-term value: 10 mg/m ³ 15 minute/minutes.		
	Form: mist		

DELs (Derived Effect Levels):

No DELs available for the mixture.

PECs (Predicted Effect Concentrations):

No PNECs available for the mixture.

8.2. Measures to manage exposure

Appropriate technical controls:

Only use in the event of sufficient ventilation. If dust, smoke, gas, steam or mist is produced by the user's actions, use a closed system, local vacuum or other technical means of control to keep occupational exposure below all recommended or legal limits. The technical means of control should also keep gas, steam and dust concentrations below all explosion limits. Use explosion-resistant ventilation.

Individual protective measures

Hygienic measures:After handling chemical products, wash your hands, underarms and
face thoroughly before you eat, drink or use the toilet and at the
end of the work day. Applicable techniques must be used in order to
remove any possible contaminated clothing. Wash contaminated
clothing before reusing. Ensure that the eye wash stations and
safety showers are close to the workplace.Eye/face protection
(EN 166):Strongly recommended: Safety goggles, face shield or other full
face protection.

Skin protection

Hand protection (EN374):

Strongly recommended: Gloves - butyl rubber, nitrile rubber (breakthrough time (max. duration of use): 1-4 hours).

Body protection

Brouwland

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(EN 14605):	Personal means for protecting the body must be selected based on the task that is to be performed; the associated risks must be approved by a specialist before the product is used.
Other skin protection:	Suitable shoes and, if needed, additional skin-protecting measures must be selected based on the task that is to be performed and the risks that are associated with this, and these must be approved by a professional prior to use of this product.
Protection of the airways: Protection of the airways	
(EN 143, 14387):	If a risk analysis indicates that this is necessary, then you must use a suitable, air-cleaning or air-supply breathing apparatus that complies with an approved standard. The choice of mask must be based on expected exposure limits, the hazards of the product and the limits for safe working of the type of mask.
Thermal hazards	
Thermal hazards:	Not applicable.
Environmental exposure contr Environmental	rols
exposure controls:	Emissions from ventilation or process equipment must be checked in order to be sure that it complies with the requirements of the environmental protection legislation. In some cases, scrubbers, filters or technical modifications of the process equipment are needed in order to bring back the emission to an acceptable level.



9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state (20°C):	Powder
Appearance/colour:	White [light].
Odour:	Chlorine
Odour limit:	Not applicable and/or determined for the mixture
pH value:	12 to 13 [concentration (% weight / weight:): 1%]
Melting/freezing point:	Not applicable and/or determined for the mixture
Initial boiling point:	Not applicable and/or determined for the mixture
Flash point (°C):	>100°C
Burning time:	Not applicable and/or determined for the mixture
Evaporation speed:	Not applicable and/or determined for the mixture
Flammability (solid, gas):	Not applicable and/or determined for the mixture
Highest/lowest flammability or	Not applicable and/or determined for the mixture
explosion limits:	
Vapour pressure:	Not applicable and/or determined for the mixture
Vapour density	Not applicable and/or determined for the mixture
Relative density:	1 to 1.2
Insolubility	Easily soluble in the following materials:
	Cold water and warm water.
octanol/water distribution co-efficient:	Not applicable and/or determined for the mixture
Auto-ignition temperature:	Not applicable and/or determined for the mixture
Decomposition temperature:	Not applicable and/or determined for the mixture
Viscosity:	Not applicable and/or determined for the mixture
Explosive properties:	Not applicable
Oxidative properties:	Yes

9.2. Other information

No additional information

10. Stability and reactivity

10.1	. Reactiv	ity
_		

Reactivity:

There are no specific test data regarding reactivity available for this product or for its components.

10.2. Chemical stability Stability:

The product is stable.

10.3. Possible hazardous reactions



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Possible hazardous reactions

Under normal storage conditions and with normal use, no dangerous reactions will occur.

Prevent dust formation during handling and prevent all possible sources of ignition (sparks and flames). Take precautionary measures against electrostatic discharge. To prevent fire or an explosion, the static electricity during transfer must be drained off by grounding and tying down containers and equipment before transporting the material. Prevent accumulation of dust particles.

10.5. Chemically incompatible materials

Substances to avoid:

Extremely reactive or incompatible with the following materials: Acids.

10.6. Hazardous decomposition products

i lazal ubus	
combustion products:	Under normal storage and usage conditions,
	no dangerous waste products are typically produced.

11. Ecological information

11.1. Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Types	Dose	Exposure
Sodium metasilicate	LD50 oral	Rat	500 mg/kg	-
	LD50 dermal	Rat	>5000 mg/kg	-
Troclosene sodium, dihydrate	LD50 oral	Rat	1823 mg/kg	-
Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	LD50 oral	Rat	404 mg/kg	-
Aliphatic hydrocarbons	LC50 inhalation substance and mists	Rat	>5.2 mg/l	4 hours
	LD50 dermal	Rabbit	>2000 mg/kg	-
	LD50 oral	Rat	>5000 mg/kg	-

Conclusion/summary:

Significant effects or critical hazards are unknown



Evaluations of acute toxicity

Route	ATE (acute toxicity evaluation) - value
Oral	2342.8 mg/kg

Irritation/corrosion

Product/ingredient name	Result	Types	Score	Exposure	Observation
benzenesulfonic acid, C10-13	Skin -	Rabbit	-	0.5 millilitres	-
alkyl derivatives, sodium salts	moderately				
	irritating				
Conclusion/summary:	Significant	effects or crit	tical hazards	s are unknown.	
Causing hypersensitivity					
Conclusion/summary:	Significant	effects or crit	tical hazards	s are unknown.	
Mutagenicity					
Conclusion/summary:	Significant	effects or crit	tical hazards	s are unknown.	
Carcinogenicity					
Conclusion/summary:	Significant	offects or crit	tical hazarde	s are unknown.	
conclusion/summary.	Significant	enects of chi			
Reproductive toxicity					
Conclusion/summary:	Significant	effects or crit	tical hazards	s are unknown.	
· ·	-				
Teratogenicity					
Conclusion/summary:	Significant	effects or crit	tical hazards	s are unknown.	

Toxicity of a specific target organ (single exposure)

Product/ingredient	Category	Manner of exposure:	Target organs
name			
Sodium metasilicate	Category 3	Undetermined	Irritation of the airways
Troclosene sodium,	Category 3	Undetermined	Irritation of the airways
dihydrate			

Toxicity of a specific target organ (repeated exposure)

Significant effects or critical hazards are unknown.

Aspiration hazard

Product/ingredient name	Result
Aliphatic hydrocarbons	ASPIRATION HAZARD - Category 1

Information about the most likely exposure routes

Significant effects or critical hazards are unknown.

Possible acute consequences to health:

Inhalation: Can emit gases, steam or dust that are very irritating or corrosive



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	for the airways. Exposure to decomposition products can be hazardous to the health. After exposure, serious consequences can occur with a delay.
Ingestion:	May cause burns to the mouth, throat and stomach.
Skin contact:	Causes serious burns.
Eye contact:	Causes serious eye injury.
Symptoms regarding physical,	chemical and toxicological properties
Inhalation:	Adverse effects can be the following:
	Irritation of the airways, coughing
Ingestion:	Adverse effects can be the following:
	stomach ache
Skin contact:	Adverse effects can be the following:
	pain or irritation; redness; blistering can occur
Eye contact:	Adverse effects can be the following:
	Pain, tears, redness

Delayed occurrence and direct effects and also chronic effects as a consequence of shortterm and long-term exposure

Short-term	Possible direct effects	Significant effects or critical hazards are unknown
exposure	Possible delayed effects	Significant effects or critical hazards are unknown
Long-term	Possible direct effects	Significant effects or critical hazards are unknown
exposure	Possible delayed effects	Significant effects or critical hazards are unknown

Possible chronic consequences to health:

Product/ingredient name	Result	Types	Dose	Exposure
Citric acid, monohydrate	Chronic NOAEL oral	Rat	1200 mg/kg	2 years

Conclusion/summary:

General:

Significant effects or critical hazards are unknown

Repeated or long-term inhalation of the substance can lead to chronic irritation of the airways. Significant effects or critical hazards are unknown Carcinogenicity: Mutagenicity: Significant effects or critical hazards are unknown Teratogenicity: Effects on development: Effects on fertility: Other information:

Significant effects or critical hazards are unknown Significant effects or critical hazards are unknown Significant effects or critical hazards are unknown Significant effects or critical hazards are unknown

12. Ecological information



12.1. Toxicity

Product/ingredient name	Result	Types	Exposure
Sodium hydroxide	Acute EC50 40 mg/l	Daphnia	72 hours
Sodium metasilicate	Acute LC50 210 mg/l	Fish	96 hours
Troclosene sodium, dihydrate	Acute EC50 0.196 mg/l	Daphnia	48 hours
Aliphatic hydrocarbons	Acute LC50 >100 mg/l	Fish	96 hours

Conclusion/summary: Significant effects or critical hazards are unknown

12.2 Persistence and degradability

Conclusion/summary:

In tests, the sum of all organic components in this product showed a degradability of > 60% BOD/COD or CO2 development, or > 70% DOC decrease. This corresponds to the standard for 'readily degradable' (e.g. according to OECD method 301).

12.3. Bioaccumulation

Product/ingredient name	Log Pow	BCF	Potential
benzenesulfonic acid, C10-13	3.32	-	High
alkyl derivatives, sodium salts			
Aliphatic hydrocarbons	>6	-	High

12.4. Mobility in soil

Separation coefficient soil/water (Koc)	Not determined for the mixture
Mobility	Not determined for the mixture

12.5. Results of the PBT and vPvB assessment:

PBT	Not applicable
vPvB	Not applicable

12.6. Other harmful effects

Significant effects or critical hazards are unknown.



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13. Instructions for disposal

The information in this section contains general advice and guidelines. The list of recommended uses in section 1 must be consulted for any available use-specific information that is provided in the exposure scenario(s).

13.1. Waste treatment methods

Product

Removal methods:

Production of waste should always be prevented to a minimum as much as possible. Empty containers or inside pockets may contain some residual product. This substance and the packaging must be transported in a safe manner. Large quantities of product remnants may not be discharged via the sewer but need to be processed in a suitable waste water treatment plant. Excess products that cannot be recycled must be transported by a waste processing company that is licensed to do so. This product, solutions and all by-products must always be transported in accordance with the applicable legislation in the area of environmental protection and waste processing and with all other applicable regional or local regulations. Prevent dispersion of spilled material and waste material and prevent this from coming into contact with the soil, waterways, drain pipes and sewer.

Hazardous waste materials:

Yes.

European Waste Catalogue (EWC):	Waste code	Waste notation
	20 01 15*	Basic waste

Packaging:

Removal methods:

Production of waste should always be prevented to a minimum as much as possible. The empty packaging must be recycled.

Special precautionary measures

Special precautionary measures:

This substance and the packaging must be transported in a safe manner. Be careful when handling empty packages/containers that have not yet been cleaned or rinsed. Empty containers or inside pockets may contain some residual product. Prevent dispersion of spilled material and waste material and prevent this from coming into contact with the soil, waterways, drain pipes and sewer.



14. Transportation information

	ADR/RID	ADN/ADNR	IMDG	ΙΑΤΑ
14.1 UN number	UN3262	UN3262	UN3262	UN3262
14.1 UN number 14.2 Correct shipping name in accordance with the model regulations of the UN	UN3262 CORROSIVE BASIC INORGANIC SOLID WASTE, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide)	UN3262 CORROSIVE BASIC INORGANIC SOLID WASTE, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide). Marine	UN3262 Corrosive basic inorganic solid waste, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide)
14.3 Transportation hazard class(es)			⁸	
14.4 Packaging group	II	II	II	II
14.5 Environmental hazards	Yes	Yes	Yes	Yes
14.6 Special precautionary measures for the user	None	None	None	None
14.7 Bulk transportation in accordance with appendix II to MARPOL 73/78 and the IBC code	Not applicable		-	

15. Regulation

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

EU regulation (EC) no. 1907/2006 [REACH]

Appendix XIV - List of substances subject to approval



Very worrisome substances:	None of the components are regulated
Appendix XVII – Limitations with regard to the	Not applicable
production, marketing and use of certain	
hazardous substances, mixtures and products:	

Other EC regulations

Ingredient declaration according to regulation 648/2004/EC regarding	\geq 30% phosphates \geq 5 - <15% chlorine bleach
detergents	<5% anionic surface-active agents, aliphatic hydrocarbons

National regulation

NL	PGS 15 (if ADR 5.2; PGS 8)
Flanders	Vlarem II bis

15.2. Chemical safety assessment

This product contains components that require chemical safety assessments.

16. Other information

List of abbreviations and acronyms:

ADN/ADNR :	Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieur European agreement on international transportation of hazardous goods over inland waterways
ADR :	ADR = European agreement on transportation of hazardous goods over the road system
BCF :	Bioconcentration Factor
CO :	Carbon Monoxide
DNEL :	Derived No Effect Level
DPD :	Dangerous Preparations Directive (1999/45/EG)
EC :	European Commission
IATA :	Internationaal Lucht Transport Vereniging (International Air Transport Association)
IBC :	Intermediate Bulk Container
EmS :	Emergency Schedule The first code refers to the corresponding fire classification and the second code refers to the corresponding leakage classification
IMDG :	International Maritime Dangerous Goods code
LogP _{ow} :	Logarithm of the octanol/water partition coefficient



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MADDOL 32/30	
MARPOL 73/78 :	International convention for the prevention of pollution by
	ships, 1973 and amended by the protocol from 1978. ("Marpol" =
	sea polluting)
OEL :	Occupational Exposure Limit
NFPA :	National Fire Protection Association
NVCI :	Nationaal Vergiftigingen Informatie Centrum (National Poison
	Information Centre)
PBT :	Persistent, Bioaccumulative and Toxic
PNEC :	Predicted No Effect Concentration
	Concentration under which exposure to a substance does not
	cause an effect
REACH :	Registration, Evaluation and Authorisation of Chemicals
vPvB	Very Persistent and Very Bioaccumulative
WGK	(Wassergefahrdungsklasse)
	A common classification of substances used in Germany
	that indicates the environmental hazard for surface water
ATE	Acute Toxicity Evaluation
CLP	Classification, Labeling and Packaging of substances and mixtures
	[regulation (EC) no. 1272/2008]
EUH phrase	CLP-specific hazard phrase
RRN / REACH #	REACH registration number
RID	European agreement on transportation of hazardous goods over
	the rail system
	· · ·

Procedure used for deriving the classification in accordance with regulation (EC) no. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1A, H314	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of the abbreviated S phrases		
H272	May intensify fire; oxidizer.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H335	Can cause irritation of the airways.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life, with long-lasting effects.	
H411	Toxic to aquatic life, with long-lasting effects.	



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Full text of the classifications CLP/GHS]		
Acute Tox. 4, H302	ACUTE TOXICITY: ORAL - Category 4	
Aquatic Acute 1, H400	ACUTE AQUATIC TOXICITY - Category 1	
Aquatic Chronic 1, H410	ACUTE AQUATIC TOXICITY - Category 1	
Aquatic Chronic 2, H411	CHRONIC AQUATIC TOXICITY - Category 2	
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1	
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Ox. Sol. 2, H272	OXIDATIVE SOLID SUBSTANCES - Category 2	
Skin Corr. 1A, H314	SKIN CORROSION/IRRITATION - Category 1A	
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION - Category 1B	
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2	
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY WITH SINGLE EXPOSURE	
	(Irritation of the airways) - Category 3	

Full text of the abbreviated R phrases		
R2	Risk of explosion by shock, friction, fire or other sources of ignition.	
R8	Contact with combustible material may cause fire.	
R22	Harmful if swallowed.	
R34	Causes burns.	
R35	Causes serious burns.	
R41	Risk of serious damage to eyes.	
R37	Irritating to respiratory system.	
R38	Irritating to skin.	
R36/37	Irritating to eyes, respiratory system and skin.	
R31	Contact with acids liberates toxic gas.	
R50/53	Very toxic to aquatic organisms, may cause long-lasting adverse effects in the	
	aquatic environment.	
R51/53	Toxic to aquatic organisms, may cause long-lasting adverse effects in the aquatic environment.	

Full text of the classifications (dangerous substances directive/dangerous preparations directive)	
E	Explosive
0	Oxidative
С	Corrosive
Xn	Harmful
Xi	Irritating
Ν	Hazardous to the environment



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The above information is correct to the best of our knowledge, based on the formula for manufacturing the product in the land of origin. Given that information, standards and regulations may change and the circumstances of use and application are outside of our sphere of influence, we cannot provide a guarantee (neither explicit nor implicit) for the integrity or continued accuracy of the information.

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