

Safety Data Sheet

according to Regulation (EC) No 1907/2006

SOLID CLEAN

Print date: 26.03.2014

Product code: LAINOX-0002

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P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container to waste treatment facility in accordance with local and national regulations .

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Mixture of the following substances with non-hazardous admixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
215-185-5	caustic soda, sodium hydroxide	65 - < 70 %
1310-73-2	C - Corrosive R35	
011-002-00-6	Met. Corr. 1, Skin Corr. 1A; H290 H314	
01-2119457892-27		
223-267-7	Phosphonic acid, (1-hydroxyethylidene)bis-, tetrasodium salt	20 - < 25 %
3794-83-0	Xn - Harmful R22	
	Acute Tox. 4; H302	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove and wash contaminated clothing before re-use.
If you feel unwell, seek medical advice.

After inhalation

Move victim to fresh air.
In the event of persistent symptoms receive medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water.
Seek medical treatment immediately.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lens. Consult (eye) doctor immediately.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting.
Never give anything by mouth to an unconscious person.
Seek medical treatment immediately.

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

Causes severe burns. Hazard of gastric perforation.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.
Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce: toxic gases/vapours.
In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.
Protective suit.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin or mucous membrane.
Use personal protective clothing.
Respirator must be worn if exposed to dust.
Keep away noninvolved persons.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.
For small quantities: Rinse with plenty of water.
after release of greater quantities: Disposal in accordance with local regulations.
Dispose of contaminated material as waste according to item 13.

6.4. Reference to other sections

Information for safe handling look up chapter 7.
Information for personal protective equipment look up chapter 8.
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures necessary if used correctly.
Avoid contact with eyes, skin or mucous membrane.

Advice on protection against fire and explosion

The product is not combustible.
No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

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Keep only in original container.

Advice on storage compatibility

Keep away from food, drink and animal feeding stuffs.

Do not store together with: Acids.

TRGS 510: Technical Rules for Hazardous Substances "storage of hazardous materials in portable tanks"

7.3. Specific end use(s)

Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	-	-	TWA (8 h)	WEL
		-	2	-	STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

See also chapter: 7

Protective and hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of workday.

Remove and wash contaminated clothes before re-use.

Keep away from food, drink and animal feeding stuffs.

When using, do not eat, drink or smoke.

Eye/face protection

If used properly, no need to wear eye protection.

Safety goggles recommended, and avoid contact with eyes and skin.

Hand protection

If used properly, protective gloves are normally not required.

Preventive hand protection is recommended. Chemical-resistant gloves (EN 374).

Skin protection

Not required under normal use.

Respiratory protection

Breathing protection is not necessary in the case of correct usage under normal conditions.

Breathing apparatus (particle filter) only if dust is formed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Colour:	Product-specific
Odour:	Odourless

pH-Value (at 20 °C): > 13

Test method
(10 g/l)

Changes in the physical state

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Melting point:	n.d.
Initial boiling point and boiling range:	n.d.
Flash point:	n.a.
Evaporation rate:	n.d.
Flammability	n.a.
Lower explosion limits:	n.a.
Upper explosion limits:	n.a.
Vapour pressure: (at 20 °C)	23 hPa
Vapour density:	n.d.
Density:	n.d.
Bulk density (at 20 °C):	1150 kg/m ³
Water solubility: (at 20 °C)	Soluble
Solubility in other solvents	No data available.
Partition coefficient:	n.d.
Ignition temperature:	n.a.
Auto-ignition temperature	n.a.
Explosive properties	The product is not explosive.
Decomposition temperature:	n.d.
Viscosity / dynamic:	n.d.
Viscosity / kinematic:	n.d.
Oxidizing properties	Non oxidizing.

9.2. Other information

No data available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No decomposition if stored and applied as directed.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Reactions with strong acids.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Acids.

May be corrosive to metals.

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

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

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Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
3794-83-0	Phosphonic acid, (1-hydroxyethylidene)bis-, tetrasodium salt				
	oral	ATE	500 mg/kg		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

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

Additional information on tests

The product has not been tested. The information is derived from the properties of the individual components.

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

Ingestion of aqueous solution causes gastrointestinal burns. Danger of perforation of the gullet and of the stomach.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
1310-73-2	caustic soda, sodium hydroxide					
	Acute fish toxicity	LC50	45,4 mg/l	96 h	Onchorhynchus mykiss	

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Hazardous water pollutant.

A pH-change becomes possible in water.

Further information

Do not release undiluted or in higher quantities into the groundwater, sewerage or waters.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Should not be disposed of with household waste. Do not discharge into the drains or bodies of water.
Disposal in accordance with local regulations.

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Recommended cleaning agent: Water with detergents.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN1823
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Classification code:	C6
Limited quantity:	1 kg / 30 kg
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number:	UN1823
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Classification code:	C6
Limited quantity:	1 kg / 30 kg

Marine transport (IMDG)

14.1. UN number:	UN1823
14.2. UN proper shipping name:	SODIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8

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Limited quantity: 1 kg / 30 kg
 EmS: F-A, S-B

Air transport (ICAO)

14.1. UN number: UN1823
14.2. UN proper shipping name: SODIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es): 8
14.4. Packing group: II
 Hazard label: 8



Limited quantity Passenger: Y844 / 5 kg
 IATA-packing instructions - Passenger: 859
 IATA-max. quantity - Passenger: 15 kg
 IATA-packing instructions - Cargo: 863
 IATA-max. quantity - Cargo: 50 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practices.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

Changes in chapter: -

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

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IBC = Code International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
 CAS = Chemical Abstract Service
 EN = European norm
 ISO = International Organization for Standardization
 DIN = Deutsche Industrie Norm
 PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose
 LC = Lethal concentration
 EC = Effect concentration
 IC = Median immobilisation concentration or median inhibitory concentration

Full text of R phrases referred to under Sections 2 and 3

22 Harmful if swallowed.
 35 Causes severe burns.

Full text of H statements referred to under Sections 2 and 3

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.

Further Information

The information in this Safety Data Sheet refer to the concentrate, not to the ready to use solution.

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)