

Revision Date 25.01.2012
Revision 02



SAFETY DATA SHEET SODIUM HYDROXIDE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	SODIUM HYDROXIDE
Product No.	100060, 100061, 105489, 101842, 101843, 106132, 106133, 106134, 106615, 106632, 103001, 104698, 105281, 101844, 106131, 300220, 300219, 108026, 110264, 301136, 303282
Synonyms, Trade Names	CAUSTIC SODA ANHYDROUS, PEARL, FLAKES, CAUSTIC SODA, SODIUM HYDROXIDE CHEM PURE, CAUSTIC SODA MICROPEARL, CAUSTIC SODA MICROPRILLS FOOD GRADE, SODIUM HYDROXIDE MACRO PEARLS, SODIUM HYDROXIDE MICRO PEARLS, SODIUM HYDROXIDE MICRO PEARLS FOOD, SODIUM HYDROXIDE CHEM PURUM, SODIUM HYDROXIDE EP PELLETS, CAUSTIC SODA FLK, CAUSTIC SODA MICROPEARL, CAUSTIC SODA PEARL O&G
REACH Registration number	01-2119457892-27
CAS-No.	1310-73-2
EU Index No.	011-002-00-6
EC No.	215-185-5

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

Identified uses	Chemical Chemical Intermediate Detergent. Soaps,
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com
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1.4. Emergency telephone number

Emergency Contact Number (Office Hours)	+44 1274 267346
Emergency Contact Number (Outside Office Hours)	+441865 407333
Finnish only	
TOL1: C20, KT1: 55	
Sds No.	1256

SECTION 2: HAZARDS IDENTIFICATION

SODIUM HYDROXIDE

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Met. Corr. 1 - H290
Human health	Skin Corr. 1A - H314
Environment	Not classified.

Classification (67/548/EEC)

C;R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

EC No. 215-185-5

Label In Accordance With (EC) No. 1272/2008



Signal Word

Danger

Hazard Statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Precautionary Statements

P234	Keep only in original container.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

Exothermic reaction with: Strong acids. Water

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name	SODIUM HYDROXIDE
REACH Registration number	01-2119457892-27
CAS-No.	1310-73-2
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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! DO NOT INDUCE VOMITING!

Rinse mouth thoroughly. Drink plenty of water. Get medical attention immediately!

SODIUM HYDROXIDE

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention immediately! Continue to rinse for at least 15 minutes.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation

Sore throat. Coughing. May cause an asthma-like shortness of breath. Upper respiratory irritation. Tracheobronchitis, pulmonary oedema.

Ingestion

Burning sensation in mouth. Nausea, vomiting. Diarrhoea.

Skin contact

Burning pain and severe corrosive skin damage. Blistering may occur.

Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Corneal damage.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards

When heated and in case of fire, toxic vapours/gases may be formed. Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

DO NOT TOUCH SPILLED MATERIAL! Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

SODIUM HYDROXIDE

Avoid spreading dust. AVOID ALL CONTACT! Avoid inhalation of dust and contact with skin and eyes. Provide good ventilation. Contaminated clothing and shoes must be discarded. Never add water directly to this product - may cause vigorous reaction/boiling. Always dilute by carefully pouring the product into the water.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Store away from: Acids. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy. Avoid contact with oxidising agents.

Storage Class

Corrosive storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
SODIUM HYDROXIDE	WEL		2	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

DNEL

Consumer	Inhalation.	Long Term	Local Effects	1 mg/m ³
Industrv	Inhalation.	Long Term	Local Effects	1 mg/m ³

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. PVC or rubber gloves are recommended.

Eye protection

Wear approved safety goggles. Wear tight-fitting goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear rubber apron.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Pellets Flakes. Solid

SODIUM HYDROXIDE

Colour	White / off-white.
Odour	Odourless.
Solubility	Completely soluble in water Alcohol
Initial boiling point and boiling range (°C)	1388 - 1390
Melting point (°C)	318
Relative density	2.13 20
Bulk Density	1100 - 1200 kg/m ³
pH-Value, Diluted Solution	> 14 10

9.2. Other information

Mol. Weight	40
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Violent reaction with: Acids. Reacts violently with water. Organic nitro compounds.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Reacts strongly with concentrated acids and chloro-hydrocarbons. Reacts strongly with water.

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

325 mg/kg (oral rat)

Inhalation

Dust is severely irritating to the upper respiratory system. Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.

Ingestion

May cause burns in mucous membranes, throat, oesophagus and stomach. Causes burns.

Skin contact

May cause serious chemical burns to the skin. Corrosive. Prolonged contact causes serious tissue damage.

Eye contact

Causes burns. Risk of corneal damage. Visual disturbances including blurred vision

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l	33-189 mg/l
EC 50, 48 Hrs, Daphnia, mg/l	40-240 mg/l

SODIUM HYDROXIDE

12.2. Persistence and degradability

Degradability

The product solely consists of inorganic compounds which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General Full protective clothing should be worn when handling this product.

14.1. UN number

Un Number Road	1823
UN No. (IMDG)	1823
UN No. (ICAO)	1823

14.2. UN proper shipping name

Proper Shipping Name SODIUM HYDROXIDE, SOLID

14.3. Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
ADR Label No.	8
IMDG Class	8
ICAO Class/Division	8
Transport Labels	



14.4. Packing group

SODIUM HYDROXIDE

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS	F-A, S-B
Emergency Action Code	2W
Hazard No. (ADR)	80
Tunnel Restriction Code	(E)

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

No information required.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

Inventory Information

EINECS AICS DSL IECS PICCS TSCA

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	25.01.2012
Revision	02
SDS No.	1256
Safety Data Sheet Status	Approved.
Date	25.01.2012

SODIUM HYDROXIDE

Signature

Jitendra Panchal

Risk Phrases In Full

R35

Causes severe burns.

Hazard Statements In Full

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

Exposure scenario
Consumer Use of Caustic Soda

Identification

Product name	Caustic Soda
REACH registration number	01-2119457892-27-XXXX
CAS number	1310-73-2
EC number	215-185-5
EU index number	011-002-00-6
Supplier	Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY

1. Title of exposure scenario

Main title	Consumer Use of Caustic Soda
Process scope	Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products. Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: for cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.
Product category	PC20 Products such as ph-regulators, flocculants, precipitants, neutralization agents PC35 Washing and cleaning products (including solvent-based products). PC39 Cosmetics, personal care. PC3 Air care products. PC8 Biocidal products. PC28 Perfumes, fragrances. PC31 Polishes and wax blends.
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC8a Wide dispersive indoor use of processing aids in open systems. ERC8b Wide dispersive indoor use of reactive substances in open systems. ERC8d Wide dispersive outdoor use of processing aids in open systems. ERC9a Wide dispersive indoor use of substances in closed systems.

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state	Solid, low dustiness , or: Liquid
Concentration details	Covers concentrations up to 100%.
<u>Conditions and measures related to external treatment of waste for disposal</u>	
Disposal method	This material and its container must be disposed of in a safe manner. Household solid waste (e.g. product packaging) is treated at municipal waste disposal sites.

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Solid, low dustiness , or: Liquid
Concentration details	Covers concentrations up to 100%.

4. Guidance to check compliance with the exposure scenario

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted.

4. Guidance to check compliance with the exposure scenario (Health 1)

Consumer Use of Caustic Soda

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted.