



Material Safety Data Sheet

Sodium Hydroxide MSDS

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Caustic Soda Pearl

CAS#: 1310-73-2

Chemical Name: Sodium Hydroxide Pearl

Company Identification:

PPEC Ltd, Sheepmarsh Lane, North Cotes Lincolnshire, DN36 5UU

For information call: 07741 161471 | 01472 389 545

Emergency Number: 07741 161471

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical characterization: Substances

CAS# Description:

1310-73-2 Sodium hydroxide

Identification number(s):

EC number: 215-185-5

Index number: 011-002-00-6

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Hazards not otherwise classified: No information known.

Label elements

GHS label elements: The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms:

GHS05

Signal word: Danger

Hazard statements: H314 Causes severe skin burns and eye damage.

Precautionary statements:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

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.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

D2B - Toxic material causing other toxic effects

E - Corrosive material

Classification system

**HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)**

Health (acute effects) = 3

Flammability = 0

Physical Hazard = 2



Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

PvB: Not applicable.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact: Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed:

Causes severe skin burns.

Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media

Suitable extinguishing agents: Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

Special hazards arising from the substance or mixture:

If this product is involved in a fire, the following can be released: Sodium oxide

Advice for fire fighters



Protective equipment:

Wear self-contained respirator.
Wear fully protective impervious suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.
Ensure adequate ventilation.

Prevention of secondary hazards:No special measures required.

Reference to other sections

See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

Handling

Precautions for safe handling

Handle under dry protective gas.
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.

Information about protection against explosions and fires: The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store away from air.
Store away from water/moisture.



Do not store together with acids.
Store away from oxidizing agents.
Store away from metals.

Further information about storage conditions:

Store under dry inert gas.
This product is hygroscopic.
This product is air sensitive.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and water.

Specific end use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

1310-73-2 Sodium hydroxide (100.0%)

PEL (USA) - Long-term value: 2 mg/m³

REL (USA) - Ceiling limit value: 2 mg/m³

TLV (USA) - Ceiling limit value: 2 mg/m³

EL (Canada) - Short-term value: C 2 mg/m³

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures



The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:

Use a respirator with type N95 (USA) or PE (EN 143) cartridges as a backup to engineering controls.

Risk assessment should be performed to determine if air-purifying respirators are appropriate.

Only use equipment tested and approved under appropriate government standards.

Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Material of gloves: Nitrile rubber, NBR

Penetration time of glove material (in minutes): Not determined

Eye protection:

Tightly sealed goggles

Full face protection

Body protection: Protective work clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information

Appearance:

Form: Solid in various forms

Color: White

Odor: Odorless



Odor threshold: Not determined.

pH-value (50 g/l) at 20 °C (68 °F): 14

Change in condition

Melting point/Melting range: 316 °C (601 °F)

Boiling point/Boiling range: Not determined

Sublimation temperature / start: not determined

Flammability (solid, gaseous): Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Auto igniting: Not determined.

Danger of explosion: Not determined.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure at 800 °C (1472 °F): 3.5 hPa (3 mm Hg)

Density at 20 °C (68 °F): 2.13 g/cm³ (17.775 lbs/gal)

Relative density: Not determined.

Vapor density: Not applicable.

Evaporation rate: Not applicable.

Solubility in / Miscibility with Water: Soluble

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

Other information

No further relevant information available.



SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: No information known.

Chemical stability: Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions: Reacts with strong oxidizing agents

Conditions to avoid: No further relevant information available.

Incompatible materials:

Acids

Air

Water/moisture

Oxidizing agents

Metals

Hazardous decomposition products: Sodium oxide

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion: Causes severe skin burns.

Eye irritation or corrosion: Causes serious eye damage.

Sensitization: No sensitizing effects known.



Germ cell mutagenicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.

Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.

Avoid transfer into the environment.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values.



A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects

No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

UN Number	UN 1823
UN Proper Shipping Name	Sodium Hydroxide, Solid Sodium Hydroxide, Solid
Transport Hazard Classes	8 Corrosive Substances
Packing Group	II
Environmental Hazards	Not Applicable
Special Precautions for user	Warning: Corrosive Substances
EMS Number:	F-A, S-B
Segregation Groups	Alkalis
Transport in bulk according to Annex II of MARPOL73/78 and IBC Code	Not Applicable
Transport/Additional information: DOT Marine Pollutant (DOT)	No



UN "Model Regulation":

UN1823, Sodium Hydroxide, Solid, 8, II

SECTION 15: OTHER REGULATORY INFORMATION

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

GHS label elements The product is classified and labelled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms

GHS05

Signal word: Danger

Hazard statements: H314 Causes severe skin burns and eye damage.

Precautionary statements

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National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity Substance is not listed.



Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if cienceLab.com has been advised of the possibility of such damages