

# SAFETY DATA SHEET CAUSTIC SODA PEARL

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

1.1. Product identifier

Product name CAUSTIC SODA PEARL

Product number HLC26/25

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

**Identified uses** Caustic Detergent. For professional use only.

Uses advised against Not for direct contact with Food or Beverage stuffs. Not for oral consumption. Not for use by

hand. Must not be used where acid based chemicals are present.

1.3. Details of the supplier of the safety data sheet

Supplier UK - Holchem Laboratories Ltd. Gateway House, Pilsworth Road,

Bury, BL9 8RD

Tel: +44 (0) 1706 222288; e-mail info@holchem.co.uk EU - Kersia Deutschland GmbH, Marie-Curie-Straße 23

53332 Bornheim - Sechtem

1.4. Emergency telephone number

**Emergency telephone** Emergency Information:-

For accidents and spillages involving this product that pose a threat to the environment, or

human health, or require immediate first aid advice call:- +44(0) 1865 407333.

Note:- This number will not accept order queries or calls dealing with equipment breakdowns. This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number) This product is registered with the National Poisons Information Centre at Beaumont Hospital,

Dublin 9, Ireland. Tel:+353 (01) 809 2566.

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290

**Health hazards** Skin Corr. 1A - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

**Hazard statements** H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

#### CAUSTIC SODA PEARL

Precautionary statements P234 Keep only in original packaging.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or 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.

P313 Get medical advice/ attention.

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

Contains SODIUM HYDROXIDE

Supplementary precautionary

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

statements P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Note:- H290 May be Corrosive to Metals Classification relates to Soft Metals such as Aluminium and Copper, when used correctly this product is not expected to be corrosive to 304 and 316 Stainless Steel.

## SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

SODIUM HYDROXIDE 100%

CAS number: 1310-73-2 EC number: 215-185-5 REACH registration number: 01-

2119457892-27

#### Classification

Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

Composition comments To the best of our knowledge, all of the substances used in this product are being supported

for the relevent application in REACH. Note:- Corrosion to Metals H290 statement refers to Soft Metals such as Aluminium or Copper, this product is not expected to corrode 304 or 316

Stainless Steel.

# SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information For immediate First Aid advice in the UK, dial 111. When it is safe to do so, remove victim

immediately from source of exposure. However, consideration should be given as to whether

moving the victim will cause further injury.

Inhalation Remove affected person from source of contamination. Provide rest, warmth and fresh air. If

breathing stops, provide artificial respiration. Get medical attention if any discomfort

continues.

Ingestion Do not induce vomiting. Rinse mouth thoroughly. Place unconscious person on their side in

the recovery position and ensure breathing can take place. Get medical attention.

Skin contact Remove contaminated clothing that is not stuck to the skin. Flush area with clean water.

Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of

water while lifting the eyelids. Continue to rinse for at least 15 minutes and get medical

attention.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information Neat product may cause chemical burns and permanent eye damage. Dilute product may

cause irritation to the skin and eyes.

Inhalation Inhalation of dry dust may result in soreness of throat and in extreme cases burning.

Inhalation of mists or vapour from hot surfaces may result in soreness, irritation or burns to

the mouth, nose and respiratory tract.

**Ingestion** Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical

burning of mouth, throat and GI tract will occur. If dilute chemical is ingested, soreness of

mouth, throat and GI tract may occur together with redness and blistering.

**Skin contact** May cause serious chemical burns to the skin.

**Eye contact** May result in permanent eye damage.

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

**Notes for the doctor** Rinse well with water to neutral pH.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media This product will not support combustion and is not flammable. Use an extinguishing media

suitable for surrounding materials.

## 5.2. Special hazards arising from the substance or mixture

Specific hazards On heating corrosive fumes may be produced. In contact with some metals (Aluminium, Zinc

and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. Note

- Comment refers to neat product.

## 5.3. Advice for firefighters

Protective actions during

firefighting

Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

#### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

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

#### 6.2. Environmental precautions

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the

Environmental Agency or other appropriate regulatory body.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots,

clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. For

waste disposal, see Section 13.

## 6.4. Reference to other sections

Reference to other sections See sections 8,12 & 13

#### **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Usage precautions Wear appropriate clothing to prevent any possibility of liquid contact and repeated or

prolonged vapour contact. Refer to section 8.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Product will absorb moisture from the atmosphere, keep in a dry, tightly closed container.

Store away from the following materials: Acids.

7.3. Specific end use(s)

Specific end use(s) Detergent, refer to Product Information Sheet for full details.

Usage description This product is suitable for use in food and beverage processing plants, but it is not designed

for direct food contact.

## SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

#### SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

#### Ingredient comments

As a requirement of REACH we have considered all of the components of this formulation. We believe that Sodium Hydroxide (NaOH) is the most hazardous component of this formulation. Sodium Hydroxide is not expected to be systemically available to the body under normal handling and use conditions, therefore systemic effects of Sodium Hydroxide after Dermal or Inhalation Exposure are not expected to occur. Based on data from our raw material suppliers, we understand that if the risk management measures outlined in section 8.2 are followed, the inhalation exposure is below the DNEL of 1mg/m3. Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet.

SODIUM HYDROXIDE (CAS: 1310-73-2)

**DNEL** Industry - Inhalation; Long term local effects: 1.0 mg/m³

DNEL data for Professional users is not yet available, but it is assumed to be the

same as for Industrial users.

Industry - Dermal; Short term local effects: 2%

PNEC No information is available for PNEC data for Sodium Hydroxide

## 8.2. Exposure controls

#### Protective equipment









Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Personal protection

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

Eye/face protection

Wear full-face visor or shield. Refer to EN Standard 166 to select appropriate level of protection.

Hand protection

Impervious Chemical Resistant Gloves of Butyl Rubber, PVC, Polychloroprene with a natural latex liner, all with a minimum material thickness 0.5mm and a breakthrough time of >480mins. Alternatively Nitrile Rubber, Fluorinated Rubber, both with a minimum thickness of 0.35 - 0.4mm and a breakthrough time of >480minutes. Refer to Standard EN 374 and EN 16523

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.

Hygiene measures

Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Contaminated clothing and shoes must be discarded. Provide eyewash station and safety shower.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 &13. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be adopted. Users of this product should consult local drainage and permitting authorities to ensure that any restrictions or discharge consents are adhered to.

General Health and Safety Measures.

In use solutions are likely to have extreme pH values and should be considered to be classified as H314. This should be considered when selecting control measures and PPE. A full Risk Assessment should be carried out before handling any chemical(s). Risk Assessments should refer to COSHH, and any other relevant legislation or industry specific guidelines governing the use of chemicals. We recommend full protective overalls, gloves and face protection when using this product.

## SECTION 9: Physical and chemical properties

#### CAUSTIC SODA PEARL

#### 9.1. Information on basic physical and chemical properties

Appearance Prills.

Colour White / off-white.

Odour No characteristic odour.

Odour threshold Not applicable.

pH pH (diluted solution): 11.5 - 12.5 @ 1%

Melting point Not applicable.

Initial boiling point and range Not applicable.

Flash point Not applicable.

**Evaporation rate** Not applicable.

**Evaporation factor** Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

explosive limits

Not applicable.

Vapour pressure Not applicable.

Vapour density Not applicable.

Bulk density Not applicable.

Solubility(ies) Soluble in water.

Partition coefficient Not applicable.

Auto-ignition temperature Not applicable.

**Decomposition Temperature** Not applicable.

Viscosity Not determined.

**Explosive properties** Not applicable.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index Not applicable.

Particle size Technically not feasible.

Molecular weight Not applicable.

Volatility Not applicable.

Saturation concentration Not applicable.

Critical temperature Not applicable.

Volatile organic compound Not applicable.

Explosive Properties Not Classified as Explosive

**Storage Temperature Range** 

#### CAUSTIC SODA PEARL

## SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not expected to react when correctly stored and used. Mixing with other chemicals may

produce unexpected reactions. The solution is strongly alkaline and reacts with strong acids

with heat generation.

10.2. Chemical stability

Stability Stable at normal ambient temperatures. Addition to water is accompanied by generation of

heat.

10.3. Possibility of hazardous reactions

Possibility of hazardous

Refer to section 10.1. Do not mix with acids, this will generate heat and give off corrosive

vapours.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong acids. Reaction with Aluminium, Zinc, Tin, Copper or their alloys produces flammable

Hydrogen Gas. A potential exists for the formation of carbon monoxide in closed equipment if

in contact with sugar residues.

10.6. Hazardous decomposition products

Hazardous decomposition

products

reactions

No specific hazardous decomposition products noted.

# SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Respiratory sensitisation

Respiratory sensitisation 
No evidence of respiratory sensitisation for any component of this formulation.

Skin sensitisation

**Skin sensitisation** No evidence of skin sensitisation for any component of this formulation.

Carcinogenicity

Carcinogenicity The components of this formulation are corrosive to skin and the respiratory tract, but will not

be systemically available in the body under normal conditions of handling. As a consequence

it is not expected to cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility The components of this formulation are corrosive to the skin and respiratory tract, but will not

be systemically available in the body under normal conditions of use and handling. As a consequence it is not expected to be toxic to the reproductive system or the developing

foetus.

**General information** Toxic effect linked with corrosive properties. See section 4.2.

**Inhalation** May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

**Eye contact** Risk of serious damage to eyes. May cause permanent eye injury.

#### SECTION 12: Ecological information

## **CAUSTIC SODA PEARL**

**Ecotoxicity** This product is not classified as environmentally hazardous. However, this does not exclude

the possibility that large or frequent spills can have a harmful or damaging effect on the

environment. Normal use is unlikely to pose a risk to the environment.

12.1. Toxicity

Acute aquatic toxicity

**Acute toxicity - fish**This mixture is not classified as toxic to aquatic organisms.

Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there

may also be damage to aquatic plants.

Normal use of the diluted product is not expected to pose any risk.

See note 12.0

12.2. Persistence and degradability

Persistence and degradability This product consists solely of inorganic materials for which biodegradation assessment is not

applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not applicable.

12.4. Mobility in soil

**Mobility** The product contains substances which are water-soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be

considered. Do not mix with other chemicals. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental

protection and waste disposal legislation and any local authority requirements.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

**UN No. (ADR/RID)** 1823

UN No. (IMDG) 1823

**UN No. (ICAO)** 1823

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

SODIUM HYDROXIDE, SOLID

Proper shipping name (IMDG) SODIUM HYDROXIDE, SOLID

Proper shipping name (ICAO) SODIUM HYDROXIDE, SOLID

Proper shipping name (ADN) SODIUM HYDROXIDE, SOLID

8

8

## 14.3. Transport hazard class(es)

ADR/RID class

ADR/RID label

IMDG class

ICAO class/division 8

## Transport labels



## 14.4. Packing group

ADR/RID 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 8-06
Emergency Action Code 2X
Hazard Identification Number 80

(ADR/RID)

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

# SECTION 15: Regulatory information

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

Classification and Labelling of Chemicals (GB CLP) and considers UK National REACH

legislation.

**EU legislation** 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 (as

amended).

Regulation (EU) No 453/2010.

Dangerous Substances Directive 67/548/EEC.

#### 15.2. Chemical safety assessment

**Pcs Information** 

# SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

(EC) No. 1272/2008: EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.

COSHH - Control of Substances Hazardous to Health.

DNEL - Derived No Effect Limit.

Industry - Refers in section 8 to application of the substance in an industrial process.

NPIS - National Poisons Information Service. PBT - Persistent, Bioaccumulative & Toxic.

 $Professional - Refers in \ section \ 8 \ to \ application/use \ of \ the \ preparation/product \ in \ a \ skilled$ 

trade premises.

REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC

1907/2006).

vPvB - Very Persistent, Very bioaccumulative.

General information Only trained personnel should use this material. This document is a Safety Data Sheet, NOT

a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH

assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification,

for this refer to section 2.

**Revision comments** Amendment to the emergency phone number in Section 1.4.

Revision date 28/10/2021

Hazard statements in full H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

**REACH extended MSDS** 

comments

REACH requires that persons handling chemicals should take the necessary risk

management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevent recommendations must be passed along the supply

chain. These assessments are generally reported in Exposure Scenarios.

Where Exposure Scenarios have been provided for substances used in this product, the

relevent information is incorporated into the safety data sheet.

END OF SAFETY DATA SHEET

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.