

SAFETY DATA SHEET

SODIUM HYDROXIDE PEARLS

Infosafe No.: 1HH1D
ISSUED Date : 01/02/2018
ISSUED by: CULBEAG HOLDINGS Pty Ltd

1. IDENTIFICATION

GHS Product Identifier

SODIUM HYDROXIDE PEARLS

Company Name

CULBEAG HOLDINGS Pty Ltd (ABN 95 007 197 079)

Address

19 Allied Drive Tullamarine
VICTORIA 3043 Australia

Telephone/Fax Number

Tel: 03 9335 4400
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Emergency phone number

03 9335 4400

Emergency Contact Name

Mr Ian Cameron

E-mail Address

sales@culbeag.com.au

Recommended use of the chemical and restrictions on use

pH adjustment, Water treatment, paint stripping, soap manufacturing, cleaning greasy metals, electroplating processes.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Corrosive to Metals: Category 1

Eye Damage/Irritation: Category 1

Skin Corrosion/Irritation: Category 1A

Signal Word (s)

DANGER

Hazard Statement (s)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Pictogram (s)

Corrosion

**Precautionary statement – Prevention**

P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see /refer to First Aid measures on the Safety Data Sheet (Section 4) or on this label).
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Precautionary statement – Storage

P405 Store locked up.
P406 Store in corrosive resistant container or a container with a corrosion resistant liner.

Precautionary statement – Disposal

Dispose of contents /container in accord with State, Territorial or Commonwealth regulations.

Other Information

The "POISON CENTER" in Australia is the Poisons Information Centre (Telephone 131126).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Sodium Hydroxide	1310-73-2	100 %

4. FIRST-AID MEASURES

Inhalation

Remove person to fresh air if effects occur. If not breathing commence artificial respiration. Oxygen may be given by trained, qualified personnel. Promptly consult a doctor or transport to an emergency medical facility/hospital.

Ingestion

If swallowed DO NOT induce vomiting. Never give fluids or induce vomiting if the patient is unconscious or is having convulsions. If patient is conscious give water to flush the mouth. Do NOT swallow rinse water. Then give 1 or 2 glasses of water to drink. Promptly transport to an emergency medical facility/hospital or a doctor.

Skin

If skin or hair contact occurs, flush contaminated area with flowing water while removing contaminated clothing and footwear. Immediate, continued and thorough washing in flowing water for at least 15 minutes is important while removing contaminated clothing and footwear. Obtain medical attention promptly. Discard contaminated footwear. Thoroughly wash contaminated clothing before re-use.

Eye contact

If in eye(s), hold eyelid(s) apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Promptly consult a doctor or transport to a hospital. Continue to wash affected eye(s) during transport.

First Aid Facilities

Safety shower with an eye wash unit adjacent to work area where solid sodium hydroxide is handled and used. Drinking quality water readily available. Portable eye wash unit for use while being transported to an emergency department of hospital or a doctor.

Advice to Doctor

Product is a CORROSIVE solid. Will cause severe burns to internal tissues, eye or skin. Treat symptomatically. Show this SDS or the label of the product to the attending doctor or attending paramedics. Induction of vomiting if deemed necessary should be controlled and medically supervised.

Indication of immediate medical attention and special treatment needed if necessary

For advice, contact the Poisons Information Centre (Telephone in Australia ; 13 1126) or consult a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Product does not burn. Protect intact containers with fine water spray. Use fire extinguishing medium suitable for source of fire.

Hazards from Combustion Products

None

Special Protective Equipment for fire fighters

Wear basic fire fighting clothing and equipment. Self-contained breathing apparatus may be required depending on the complexity of the fire. Avoid contact with this product during fire-fighting operations. If contact with product likely, change to full chemical resistant clothing with SCBA.

Specific Methods

Keep people away. Isolate fire area and deny entry of non-essential personnel. Fight fire for other materials that are burning.

Specific Hazards Arising From The Chemical

Product will not burn. Product is corrosive. Product reacts with water. Reaction may produce heat. Reaction may be violent. Violent steam generation or eruption may occur upon application of a direct water stream to damaged containers.

Reacts with aluminium, zinc, brasses and tin generating highly flammable hydrogen.

Hazchem Code

2W

6. ACCIDENTAL RELEASE MEASURES

Spills & Disposal

Evacuate area. Clear non-essential personnel from area. Product is highly corrosive to skin and eyes.

Wear appropriate protective clothing and equipment. Contain spilled product to prevent contamination of soil, sewers, drains, or surface water. If product either solids or solution thereof e.g. runoff from fire, advise local emergency authority. If feasible collect all the residual contained material for responsible disposal. Otherwise neutralise very carefully the residual with a dilute acid preferably acetic acid.

7. HANDLING AND STORAGE

Precautions for Safe Handling

When handling solid sodium hydroxide, a CORROSIVE substance, wear approved protective clothing (see section 8) to avoid skin and eye contact and breathing in product dust. When preparing solutions of sodium hydroxide always commence with cold water and add small amounts of the solid sodium hydroxide to the water while constantly stirring. Observe temperature of solution regularly. Do not allow to boil. Allow to cool to less than 40°C before adding more product.

NEVER add water, cold or hot, to the sodium hydroxide solution.

The water should be luke warm i.e. about 25°C. Never start with hot or cold water.

The addition of solid sodium hydroxide to a liquid will cause a rise in temperature. If the sodium hydroxide becomes concentrated in one area, is added too rapidly or is added to hot or cold liquid, a rapid temperature increase can result in dangerous mists, boiling or spattering or a VIOLENT ERUPTION of liquid solution.

Conditions for safe storage, including any incompatibilities

Product is classified as a Dangerous Good, Class 8 - CORROSIVE, for storage.

Store away from incompatible materials. Keep away from acids, most organic materials, oxidising agents, food stuffs and ammonium salts. Do NOT store in aluminium, zinc (galvanised) or brass containers - corrosion of the metal will occur and hydrogen is generated. Store in a dry place. Keep containers tightly closed when not in use. Check stored containers regularly for physical damage and spills. Avoid physical impacts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Workplace Exposure Standard (WES)* declared by SWA* for the workplace environment:

Sodium hydroxide - 2 mg per cubic metre, Peak; where:-

Peak - means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

Appropriate Engineering Controls

Product is not volatile therefore good general ventilation should be adequate. Avoid generating dusts or mists when handling or using product. If a dust or mist is formed wear full protective clothing and self contained breathing apparatus. Review operational procedure and reduce/eliminate/control dust/mist generation to less than the WES*.

Respiratory Protection

Atmospheric levels should be maintained below the exposure standard (above). If respiratory irritation is experienced, select* and fit an approved air-purifying respirator*.

Eye Protection

It is imperative to prevent eye contact. Use approved* chemical goggles. Wear an approved* full face shield which allows the use of chemical goggles or wear an approved full-face respirator* to protect the face and eyes when there is any likelihood of splashes when using the product. Guidance to recommended practices for eye protection in the workplace environment is provided in AS/NZS 1336*.

An eye wash fountain/unit should be located and readily accessible from immediate work area.

Hand Protection

Use protective glove appropriate for handling product. Refer to AS/NZS Standard for guidance and selection*.

Body Protection

Avoid all direct contact with this product.

Use approved protective clothing impervious to this material. Refer to AS/NZS document on occupational protective clothing for information*.

Selection of specific items will depend on operations. Wear long-sleeved overalls. Use elbow length PVC gloves, aprons and boots made from suitable synthetic polymer/elastomers - leather footwear is NOT recommended - suitable for proposed operations. A safety shower should be located and readily accessible from work area. Remove contaminated clothing immediately, wash skin with water. Launder clothing before re-use. Contaminated leather items such as footwear, belts and watchbands should be removed and destroyed.

Hygiene Measures

It is a good work practice to wash hands, arms, and face before eating, drinking or smoking or using toilet facilities and at the end of each working period.

Other Information

Note well: Selection of protective equipment should be dependent on a comprehensive risk assessment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

White to cream coloured solid. No odour.

Melting Point

318°C

Boiling Point

1390°C

Solubility in Water

Readily soluble.

Solubility in Organic Solvents

Soluble in glycerol and ethanol.

Specific Gravity

2.13

pH

13.5 (1% aqueous solution)

Vapour Pressure

Sodium hydroxide is not volatile.

Vapour Density (Air=1)

Not relevant

Flash Point

None

Flammability

Product is a non-combustible solid.

Flammable Limits - Lower

Not applicable

Flammable Limits - Upper

Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions. Keep container closed when not in use otherwise carbon dioxide will be absorbed and react with the sodium hydroxide and lower the quality of the remaining sodium hydroxide. Reacts violently with acids. Reacts with ammonium salts releasing ammonia.

Chemical Stability

Stable but will readily absorb and react with carbon dioxide from ambient air.

Conditions to Avoid

Heat is generated when solid sodium hydroxide is mixed with water. Control dilution processes by adding small portions of solid sodium hydroxide to water while stirring. Spattering and boiling can occur. (Refer to Section 7 - Safe Handling.)

Flammable hydrogen gas can be generated from contact with metals such as;

aluminium, brass, zinc & tin and hydrogen gas can form explosive mixtures with air in confined spaces.

Avoid contact with acids, halogenated organic compounds, organic nitro compounds, glycols.

Reaction with ammonium compounds will release toxic ammonia and with amines will release the toxic amine many of which are volatile.

Incompatible materials

Aluminium, zinc (galvanised containers), brasses and tin. A reaction product is flammable hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Not available.

Ingestion

Very CORROSIVE to tissue.

Will cause severe burns to the mouth and throat. Swallowing of the product will cause irritation/burns and/or ulceration of the digestive tract.

Inhalation

Inhalation of dust may cause severe respiratory irritation and possibly tissue damage of the upper respiratory tract (nose and throat). Symptoms may include sneezing, sore throat or excessive mucous generation ("runny nose")

Skin

Very CORROSIVE. Brief single exposure may cause severe irritation and possibly skin burns. Frequently repeated or prolonged contact may cause skin/tissue damage (necrosis).

Eye

Very CORROSIVE. If in eye will cause very severe irritation with corneal injury that may result in permanent impairment of vision and most probably blindness.

12. ECOLOGICAL INFORMATION

Environmental Protection

Material is expected to be slightly toxic to aquatic organisms on an acute basis. Avoid entry into watercourses, drains and sewers. Entry into watercourse or bodies may cause shifts in pH outside range 5 - 10 which may be toxic to aquatic organisms. Highly corrosive to animal and plant life.

13. DISPOSAL CONSIDERATIONS

Waste Disposal

Dispose of waste material in an approved waste disposal system in accordance with State, Territorial or Commonwealth regulations.

Container Disposal

Triple water rinse empty packaging before disposal in accord with State, Territorial or Commonwealth regulations.

14. TRANSPORT INFORMATION

Transport Information

Classified as a Dangerous Good Class 8 - CORROSIVE, for transport by road, rail, sea or air. Road and rail transport should be in accord with the Australian Dangerous Goods Code* and associated transport regulations.

Do not transport with food or foodstuff empties.

U.N. Number

1823

UN proper shipping name

SODIUM HYDROXIDE, SOLID

Transport hazard class(es)

8

Packing Group

II

Hazchem Code

2W

EPG Number

8A1

IERG Number

37

15. REGULATORY INFORMATION

Regulatory information

Classified as a DANGEROUS GOOD according to the ADG Code* - refer to Section 14 above.

Classified as a HAZARDOUS CHEMICAL - CORROSIVE, according to the GHS criteria" approved by SWA with hazard classifications of:-

Corrosive to metals - Category 1;

Eye damage/irritation - Category 1 and

Skin damage/irritation - Category 1A.

Classified as POISON - Schedule 6 according to the National Poisons Standard* or SUSMP*.

Poisons Schedule

S6

Packaging & Labelling

Container is marked (labelled) with a DANGEROUS GOOD; Class 8 - CORROSION pictogram in accord with the ADG Code*.

For labelling purposes pictogram, essential statements for hazard, response, prevention, storage and disposal are detailed in Section 2 of this SDS above. Note: that ADG Class 8 pictogram on label is acceptable as equivalent to the Hazardous Chemical pictogram for Corrosion.

In the workplace, decanted quantities of the product must be labelled in accord with Code of practice for labelling workplace hazardous chemicals*

NB: If this product is repacked for sale to the general public the packaging and labelling requirements of the relevant Act controlling the sale of scheduled poisons need to be adopted. Refer to National Poisons Standard* or SUSMP*.

Australia (AICS)

Sodium hydroxide is included in the Australian Inventory of Chemical Substances (AICS)*.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

MSDS originally issued in 2008 was reissued as SDS on 21 September 2016. This SDS has been reviewed and revised and re-issued on 1st FEBRUARY 2018. Document is prepared in accord with the SWA approved code of practice for preparing a SDS*.

In summary, significant changes made to Section 2 - GHS classification; and added Other information subsection; Section 4 - First Aid instructions; Section 5 - Added Special Protective Equipment for fire fighters; Section 7 - edited Precautions for Safe Handling & Conditions for safe storage; Section 8 - Changed NES to WES in Occupational exposure limit values, Body Protection - inserted reference to AS/NZS for occupational protective clothing, added Other information subsection; Section 11 - edited Inhalation subsection; Section 15 - Revised Regulatory information subsection to reflect GHS criteria used, revised Packaging & Labelling subsection to reflect new GHS criteria, and added information regarding repackaging as a retail product i.e. referral to National Poisons Standard; Section 16 - Revised date of issue, reported significant changes within SDS and revised List of References to indicate use of GHS criteria.

References

- * GHS = Globally Harmonised System for the Classification and Labelling Hazardous Chemicals. United Nations publication
 - * Australian Dangerous Goods Code, 7th Edition, 2007 as amended.
 - * WES = Exposure Standards for Atmospheric Contaminants in the Occupational Environment in exposure standards section of HCIS, as amended.
 - * SWA = Safe Work Australia formerly National Occupational Health and Safety Commission.
 - * AS/NZS 1716: Respiratory protective devices.
 - * AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.
 - * AS/NZS 1337: Eye protectors for the industrial applications.
 - * AS/NZS 1336: Recommended practices for eye protection in the industrial environment.
 - * AS/NZS 2161:2016 - Occupational protective gloves.
 - * AS/NZS 4501:2008 - Occupational protective clothing - Guidelines on selection plus General requirements.
 - * National Model Code of Practice for Labelling of Workplace Hazardous Chemicals, Safe Work Australia
 - * National Poisons Standard - Commlaw website
 - * SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons, Therapeutics Goods Authority
 - * AICS = Australian Inventory of Chemical Substances maintained by National Industrial Chemicals Notification and Assessment Scheme.
 - * National Model Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals, Safe Work Australia.
- HCIS is the Hazardous Chemicals Information System managed by SWA.
AS = Australian Standard.
NZS = New Zealand Standard.

Contact Person/Point

BUSINESS HOURS: Product Information Officer, (03) 9335 4400

This SDS summarises our best knowledge of the health and safety hazard information of this product and how to safely handle and use the product in the workplace. Each user must review this SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is available on our website at www.culbeag.com.au

END OF SDS

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