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SAFETY DATA SHEET

# **Progressive Supplies** Sales - Service - Supplies - Local Support

## l Identification

**GHS Product Identifier** 

# PRO CAUSTIC SODA DRY

Other means of identification

No Information provided.

Recommended use of the chemical and restriction on use

Multi purpose heavy duty alkaline cleaner.

Supplier's details 5 Heads Pty Ltd trading as:

Perth Progressive Supplies, **Street Address:** 230 Gnangara Rd, Landsdale WA 6065 **Ph:** 08 9303 9290 **E:**perthsales@progressivesupplies.com.au

Broome Progressive Supplies, **Street Address:** 7 Haynes Street, Broome WA 6725 **Ph:** 08 9192 6200 **E:** sales@progressivesupplies.com.au

Derby Progressive Supplies, **Street Address:** 24 Clarendon St Derby WA 6728 **Ph:** 08 9191 1000 **E:** derby@progressivesupplies.com.au

# ACN: 098 396 546

Emergency phone number National Poisons Information Centre: Phone Australia **13 11 26**.

## 2 Hazard(s) identification

Classification of the substance or mixture

## C Corrosive

Hazard Classification: Hazardous according to the criteria of ASCC (NOHSC:1008(2004))

Poison Schedule: 6

## **GHS** label elements

#### Causes severe skin burns and eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

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

Do not get in eyes, on skin, or on clothing.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container to accordance to local laws.

#### Other hazards which do not result in classification

# Warning Statement:

WARNING - Vapor may be harmful May give off dangerous gas if mixed with other products.

#### 3 Composition/information on ingredients

Description	CAS Number EINECS Number	%	Note
sodium hydroxide	1310-73-2	0 - 100	

#### 4 First-aid measures

#### Description of necessary first-aid measures

## Swallowed:

Immediately rinse mouth with water. If swallowed, **DO NOT** induce vomiting. Give a glass of water to drink if victim is conscious. Seek urgent medical assistance.

## Eye:

If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor immediately.

## Skin:

Remove contaminated clothing. Wash affected area with plenty of water. Seek medical attention immediately. Wash clothing before reuse.

## Inhaled:

Move victim to fresh air. Apply resuscitation if victim is not breathing. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume comfortable position and keep warm at rest. Seek medical attention immediately.

First Aid Facilities: Eye wash fountain, safety shower and normal wash room facilities.

#### Most important symptoms/effects, acute and delayed

No Information provided.

# Indication of immediate medical attention and special treatment needed, if necessary

# Advice to Doctor:

Treat symptomatically based on individual reactions of patient and judgement of doctor.

Sodium Hydroxide is highly corrosive. Vomiting has not been induced becasue of rish of aspiration into the lungs. If swallowed, may cause holes in stomach and intestines. Evcuation of stomach should not be attempted.

In case of poisoning, contact Poisons Information Centre In Australia call Tel: 131126.

# 5 Fire-fighting measures

# Suitable extinguishing media

In case of fire, use appropriate extinguishing media most suitable for surrounding conditions. Suitable media may include fine water spray, normal foam, dry agent such as carbon dioxide or dry chemical powder. Use water spray to cool fire exposed containers.

Caution: heat may be involved on contact with water

FLAMMABILITY Product is non-flammable solid.

# HAZCHEM CODE: 2W

Specific hazards arising from the chemical

**HAZARDOUS PRODUCTS OF COMBUSTION** Non-combustible solid. Avoid generating dust. When involved in fire this product may emit toxic sodium oxide gases.

The heat generated by the contact with water (heat of dilution) may be sufficient to ignite other combustibles.

# Special protective actions for fire-fighters

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing .

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Control run off water and prevent it from entering water course or drainage systems.

# 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

**GENERAL RESPONSE PROCEDURE** Personnel involved in the cleanup should wear full protective clothing. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area.

# **Environmental precautions**

Do NOT let the product reach drains or water ways. If product does enter waterways advise environmental protection authority or your local waste management. Use corrosion-resistant and spark-proof tools and equipment.

# Methods and materials for containment and cleaning up

**CLEANUP PROCEDURES** Contain and sweep/shovel up spills with dust binding material or use industrial vacuum cleaner. Transfer to a suitable, labeled chemical waste container and dispose of promptly as hazardous waste. Never neutralize the solid product. Prevent the product from becoming damp. Reactive with water. In the case of a solid, anhydrous sodium spill on soil, groundwater pollution will occur if precipitation occurs prior to cleanup. Precipitation will dissolve some of the solid (with much heat given off) and create an aqueous solution of sodium hydroxide, which then will be able to infiltrate the soil. Spills on the areas other than pavement, such as dirt or sand, may be handled by removing the affected soils and placing in approved containers.

# 7 Handling and storage

# Precautions for safe handling

**HANDLING** Ensure eye bath and safety shower are available and ready to use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.

# Conditions for safe storage, including any incompatibilities

# STORAGE:

Store in cool, dry, well-ventilated area.
Keep container tightly closed when not in use.
Inspect regularly for damages, leaks.
Protect against physical damage.
Store away from incompatible materials as listed in section 10.
Store away from food stuffs.
The floor must be waterproof and anti-slip.
Store between 5-30'C. this product has an UN classification of 1823 and a dangerous goods class 8

# (corrosive) according to the Australian code for the transport of dangerous goods by road and rail.

# 8 Exposure controls/personal protection

# **Control parameters**

Exposure Standards The following exposure standard has been established by the Australian safety and compensation council (ASCC); Sodium hydroxide CAS: 1310-73-2 TWA=2mg/m3 peak limitation NOTE: the exposure value at the TWA is the day working week. Peak limitation- a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible not exceeding 15 minutes. These exposure standards are a guide to be used in the control of the occupational health hazards. All atmospheric contamination should be kept as low a level as possible as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of toxicity.

# Appropriate engineering controls

Engineering Controls Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate unless the material is heated, reacted or otherwise changed in some type of chemical reaction, then the use of a local exhaust ventilation system is recommended.

## Individual protection measures

Advoid contact with skin and eyes. Avoid breathing dusts or aerosols. Personal protection to be selected as approppriate to mode of use, quantity handled and degree of hazard.

# 9 Physical and chemical properties

Physical and chemical properties

Physical state: Solid Appearance: Solid beads, blocks, flake, pearl, or prill Boiling Point Melting Point: >999°C Vapor Pressure: 0 mmHg(20'C) torr (@20'C) Colour: White, Translucent pH: >14 Solubility: 420g/L (20'C) Freezing point: 318'C Specific Gravity: 2.13 (20'C) Flash Point: N/A Odor: Odourless

# **10** Stability and reactivity

## Reactivity

No Information provided.

# **Chemical stability**

Stable under normal conditions of use.

# Possibility of hazardous reactions

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization does not occur. Reacts dangerously with metals, acetic acids, allyl chloride, chlorine trifluride, chloroform, methyl alcohol, chloronitrotoluene, chlorosulphonic acid, glyoxalin, cyanohydrin, hydrochloric acid, hydrofluoric acid, hydroguinone, nitric acid, sulphuric acid and oleum etc. Caustic soda also reacts readily with various reducing sugars such as fructose, lactose, maltose, and dry whey solids to produce carbon monoxide. Heat is generated when mixed with water. Spattering, boiling and violent eruptions may occur.

## Conditions to avoid

Heat, exposure to moisture or air, flames, ignition sources and incompatibles.

## Incompatible materials

Incompatible with oxidizing agents, acids, nitriles, alkaline earth metals in powdered form, ammonium compounds, cyanides, magnesium, organic, nitro compounds organic combustible substances, halogenated organics, phenols, glycols, chlorinated hydrocarbons, nitro methane, and nitroparafins. Also Incompatible with water.

# Hazardous decomposition products

When involved in a fire this product may emit toxic sodium oxide gases. The heat generated by

contact with water (heat of dilution) may be sufficient to ignite other combustible materials. Reacts with metals liberating flammable hydrogen gas. Highly exothermal reaction with strong acids and water. Caustic soda forms salts with nitro methane and nitroparaffins that explode on compact.

#### 11 Toxicological information

#### **Toxicological (health) effects**

Oral LD50 Rat : 2000mg/kg Oral LDLO Rabbit: 500mg/kg Dermal Rabbit, Adult : 500mg/24hrsevere eye irritation eye Rabbit, Adult : 50mg/24hr severe irritation IPR LD50 Mouse: 40mg/kg

#### Information on the likely routes of exposure

No Information provided.

#### Symptoms related to the physical, chemical and toxicological characteristics

No Information provided.

Delayed and immediate effects and also chronic effects from short and long term exposure

# ACUTE HEALTH EFFECTS:

## Swallowed: Corrosive!

Swallowing may cause severe burns of the mouth, throat and stomach as well as diarrhoea and vomiting, from which collapse may result. Vomitus usually contains blood and possible tissue. All tissues which come in contact with this chemical may be damaged. Death may result from ingestion. If patient survives, permanent damage to the gastrointestinal tract may occur and the person may have permanently difficulty swallowing. May cause perforation of esophagus, stomach and intestines.

## Eye: Corrosive!

Eye contact with caustic soda solid, dust mist or solution usually results in immediate pain. Will cause burns to the eyes with effects including: Pain, tearing, conjunctivitis and if duration of exposure is long enough, blindness will occur.

## Skin: Corrosive!

Caused severe burns. Skin contact may result in irritation which may not be immediately painful. Greater exposure results in severe burns, and ulcers with scarring.

## Inhaled:

Inhalation causes respiratory irritation which may develop into serious lung injury depending on the degree of the exposure. Serious pneumonia may develop. Prolong exposures may result in upper respiratory irritation and ulceration of the navel passage; high levels cause permanent lung injury.

# Carcinogen Category: 0

#### Numerical measures of toxicity (such as acute toxicity estimates)

No Information provided.

# Interactive effects

No Information provided.

# Where specific chemical data are not available

No Information provided.

# Mixtures

No Information provided.

# Mixture versus ingredient information

No Information provided.

## **Other information**

No Information provided.

# **12** Ecological information

## Toxicity

**Ecotoxity**: onchorhynus mykiss LC50/96hr :45.4mg/L L.macrochirus LC50/48hr :99mg/L Daphnia magna EC50/24hr :76mg/L Material is slightly toxic to aquatic organisms on an acute basis (LC50 between 10 and 100mg/L in most sensitive species). May cause PH shifts outside the range of 5-10 standard units ; this change may be toxic to aquatic organisms.

## Persistence and degradability

Strong alkaline substances that dissociates fully. The concentration of OH-(pH) is in general regulated by equilibria between CO2, HC03- and CO32-. In general the buffer capacity depends on the concentration of these substances.

## Bioaccumulative potential

No Information provided.

# Mobility in soil

Very mobile in soil and soluble in water. In case of a solid, anhydrous sodium spill on soil, groundwater will occur if precipitation occurs prior to cleanup. Precipitation will dissolve some of the solid (with much heat given off) and create an aqueous solution of sodium hydroxide, which then would be able to irritate the soil. However, prediction of the concentration and properties of the solution produced would be difficult.

## Other adverse effects

**Environmental fate:** Do NOT let product reach waterways, drains and sewers. The hazard for the environment is caused by the hydroxyl ion (pH effect).

## 13 Disposal considerations

## **Disposal methods**

**General information:** Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with local, state and federal regulations or recycled/reconditioned at an approved facility.

**Special Precautions for Land Fill:** Contact a specialist disposal company or the local waste regulator for advice. The product can be neutralized using highly diluted hydrochloric acid, which should be added very slowly by specialist personnel wearing proper protection. **NEVER NEUTRALISE THE SOLID PRODUCT**.

#### **14 Transport information**

UN Number 1823

UN Proper Shipping Name SODIUM HYDROXIDE, SOLID

Transport hazard class(es)
Dangerous Goods Class: 8 Corrosive substances

Hazchem: 2W

Packing group, if applicable Packing Group: ||

Environmental hazards No Information provided.

Special precautions for user No Information provided.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No Information provided.

## **15** Regulatory information

Safety, health and environmental regulations specific for the product in question

Poison Schedule: 6 AICS Name: SODIUM HYDROXIDE (Na(OH)) EPA (New Zealand) Hazardous Substances and New Orgasims Act (HSNO) Approval code: HSR001547

#### 16 Other information

#### Other information

Key Legend Information: NOHSC -National Occupational Health & Safety Commission {Formerly Worksafe}[Aust] SUSDP -Standard for the Uniform Scheduling of Drugs and Poisons [Aust]
TWA -Time Weighted Average [Int]
STEL -Short Term Exposure Limit [Int]
AICS -Australian Inventory of Chemical Substances
EPA -Environmental Protection Agency [Int]
NIOSH -National Institute for Occupational Safety and Health [US]
AS/NZS 1715 -Selection, use and maintenance of respiratory protective devices. [Aust/NZ]
AS/NZS 1716 -Respiratory protective devices. [Aust/NZ]
IATA -International Aviation Transport Authority [Int]
ICAO -International Civil Aviation Organization [Int]
IMO -International Maritime Organisation. [Int]
IMDG -International Maritime Dangerous Goods [Int]
United Nations Recommendations for the Transport of Dangerous Goods and Globally Harmonized System for the classification and labelling of Chemicals. [Int]
EU -European Union

[Aust/NZ] = Australian New Zealand [Int] = International [US] = United States of America

Removal of the heading of *Poison Schedule [Aust]*, in section 3 and 15 of this Safety Data Sheet (SDS) makes this a valid health and safety document in other international jurisdictions/countries. For full compliance please contact your Federal, State or Local regulators for further information.

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THE SDS IN THE CONTEXT OF HOW THE PRODCT 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, SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.

OUR RESPONSIBILITY FOR PRODUCT SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken. Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Please read all labels carefully before using product.

# **Principal References:**

Information supplied by manufacturer, reference sources including the public domain.

# END OF SDS