

# 大连星镁矿业有限公司

## STAR GRACE MINING CO., LTD.

Add: 29-67, No.929, Xinan Road, Shahekou District, Dalian, Liaoning, China

### MATERIAL SAFETY DATA SHEET (MSDS)

#### 1. Product and Company Identification

<u>Trade/Commercial Name</u>	SODIUM HYDROXIDE PEARLS		
<u>Formula</u>	NaOH		
<u>Chemical Family</u>			
<u>Synonyms</u>	Caustic soda; Sodium hydrate; White Caustic		
<u>Un No</u>	1823	Hazchem Code	2r
<u>ERG No</u>	154	EAC	59

#### 2. Composition

Hazardous components Sodium hydroxide > 98.5% MIN

#### 3. Hazards identification

Corrosive

Poisonous if inhaled or swallowed.

Skin contact poisonous.

Contact could cause burns to skin and eyes.

Fire could produce irritating or poisonous gases.

Runoff from fire-control or dilution water could cause pollution.

Severe burns of eyes and skin; respiratory tract irritant.

Can react explosively with certain chemicals.

#### 4. First Aid Measures

First Aid Skin Wash off with water.

Remove clothing

Shower thoroughly

First Aid Eyes Flush eyes with water for 15 minutes.

Hold eyelids open while washing.

First Aid Ingested Do not induce vomiting. Give oxygen

First Aid Inhalation Remove from contaminated area. Give oxygen

#### 5. Fire Fighting Measures

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Some of these materials may react violently with water.

SMALL FIRES: Dry chemical, Co<sub>2</sub>, Halon, water spray or alcohol foam.

LARGE FIRES: Water spray fog or standard foam is recommended.

Move container from fire area if you can do it without risk.

Cool containers that are exposed to flames with water from the side until well after the fire is out. Stay away from ends of tanks.

Keep unnecessary people away; isolate hazard area and deny entry.

Stay upwind; keep out of low areas.

Positive-pressure self contained breathing apparatus (SCBA) and chemical protective clothing that is specifically recommended by the shipper or manufacturer may be worn. It will provide little or no thermal protection.

Structural firefighter's protective clothing is NOT effective with these materials.

### **6. Accidental Release Measures**

Full protective clothing including breathing apparatus

Dilute (substance may be washed to drain with a lot of water)

#### **PRECAUTIONS:**

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

#### **SPILL OR LEAK:**

Do not touch spilled material.

Stop leak if you can do it without risk.

Use water spray to reduce vapours.

#### **SMALL SPILLS:**

Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

#### **LARGE SPILLS:**

Dike liquid spill for later disposal

### **7. Handling And Storage**

Separation of at least 3M from the following classes is recommended.

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Flammable Liquids Flammable Solids

Spontaneously Combustibles Poison

Fire separation of at least 5M or 4Hr fire resistant wall

from the following classes is recommended.

Flammable Gases Dangerous When Wet

Oxidizing Agents Organic Peroxides

Storage in the same room or space is prohibited with the following classes:

The rooms or spaces should be at least 10M apart.

Explosives Radioactive

### 8.Exposure Controls/Personal Protection

#### Occupational Exposure Limits

T WAOEL-RL SHORT TERM OEL-RL

PPMa)MG/M3b)PPMa)MG/M3b)

#### Controls

-C2-2

C=Ceiling Limit

The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure.

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release.

Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside.

Supply sufficient replacement air to make up for air removed.

Have a safety shower/eye wash fountain readily available in the immediate work area

#### Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, impermeous gloves, coveralls, & respiratory protection.

Have appropriate equipment available for use in

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emergencies.

### 9. Physical Chemical Properties

White to slightly coloured pellets, lumps, sticks or flakes.

Boiling Point: solid: 1390 °C.

50% solution: 142 °C to 148 °C.

Melting Point: solid: 310 to 320 °C.

50% solution: 12 to 15 °C.

Solidification Point: 50% solution: 5 °C.

Completely soluble in water. Solid reacts with water with release of appreciable heat. Solids and concentrated solutions are highly hygroscopic.

Solid exposed to air dissolves in absorbed moisture and reacts with carbon dioxide forming harmless sodium carbonate.

### 10. Stability And Reactivity

Conditions to Avoid Warm ammoniacal silver nitrate, nitrobenzene, sodium tetrahydroborate, 1,1,1-trichloroethanol, cyanogen azide,

Incompatible Materials It reacts with acids with release of heat. Solutions react with aluminium, zinc, tin and their alloys with release of highly flammable hydrogen.

### 11. Toxicological Information

see section 3.

### 12. Ecological Information

No ecological problems are expected when the product is handled and used with due care.

### 13. Disposal Considerations

Disposal Method Product There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste.

Disposal Method Packaging Disposal in accordance with local legal provisions.

### 14. Transport Information

UN No 1823 Hazchem Code 2r

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ERG No 154 EAC 59

ARD/RID Class NA

IMDG Code 8215 IMDG-Packaging Group III

Marine Pollutant True

Class Class:8 Corrosive Group: II

Subsidiary Risks NONE

Tremcard Number 121/80G13

### 14. Regulatory Information

EEC Hazard Classification 8

Risk Phases R35 Causes severe burns

Safety Phases S2,S26,S27,S37/38

Keep out of reach of children

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Wear suitable gloves and eye/face protection

National Legislation

### 16. Reason for Alteration: General update.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properness of the product.

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