TIANJIN XIBEIER INTERNATIONAL CO.,LTD

YITINGYUAN 23B,NO 22 OF LIUWEI ROAD,HEDONG DISTRICT,TIANJIN CHINA

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Trade / Commercial Name

SODIUM HYDROXIDE FLAKE

(CAUSTIC SODA WHITE FLAKES 99% MIN.)

<u>Chemical Name</u> Sodium hydroxide - FLAKE

<u>Formula</u> NaOH

Chemical Family

Synonyms Caustic soda; Sodium hydrate; White Caustic

<u>Un No</u> 1823 <u>Hazchem Code</u> 2r ERG No 154 EAC 59

2. Composition

<u>Hazardous Components</u> Sodium hydroxide > 99 % 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

<u>First Aid Skin</u> Wash off with water.

Remove clothing. Shower thoroughly.

<u>First Aid Eyes</u> Flush eyes with water for 15 minutes.

Hold eyelids open while washing.

<u>First Aid Ingested</u> Do not induce vomiting.

Give oxygen.

First Aid Inhalation Remove from contaminated area.

Give oxygen.

5. Fire Fighting Measures

Some of these materials may react violently with water.

SMALL FIRES: Dry chemical, CO2, 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:

Takeup 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.

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 W A OEL-RL SHORT TERM OEL-RL

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

- C 2 - 2

C = Ceiling Limit

<u>Controls</u> 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,

imperious gloves, coveralls, & respiratory protection.

Have appropriate equipment available for use in emergencies.

9. Physical & Chemical Properties

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

Boiling Point: solid: 1390 oC. 50% solution: 142 oC to 148 oC. Melting Point: solid: 310 to 320 oC.

50% solution: 12 to 15 oC.

Solidification Point: 50% solution: 5 oC.

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

<u>Conditions to Avoid</u> Warm ammoniacal silver nitrate, nitrobenzene, sodium tetrahydroborate,

1,1,1- trichloroethanol, cyanogen azide,

<u>Incompatible Materials</u> It reacts with acids with release of heat. Solutions react with aluminium, zinc,

tin and their alloys with release of highly flammable hydrogen.

Other

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

<u>Disposal Method Product</u> There are no uniform EC regulations for the disposal of chemicals or residues.

Chemical residues generally count as special waste.

The disposal of the latter is regulated in the EC member countries through

corresponding laws and regulations.

We recommend that you contact the authorities in charge or approved

waste disposal companies which will advise you on how to dispose of special

waste.

Disposal Method Packaging Disposal in accordance with local legal provisions.

14. Transport Information

<u>UN No</u>	1823	Hazchem Code	2r
ERG No	154	EAC	59
ARD/RID Class	NA		

IMDG Code 8215 IMDG-Packaging Group II

Marine Pollutant True

<u>Class</u>: 8 Corrosive Group: II

Subsidiary Risks None

<u>Tremcard Number</u> 121/80G13

15. Regulatory Information

EEC Hazard Classification 8

<u>Risk Phases</u> R35 Causes severe burns

<u>Safety Phases</u> 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 advise

Wear suitable gloves and eye/face protection

National Legislation

16. Other Information

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.