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Material Safety Data Sheet

Caustic Soda Flakes/Pearls

SECTION I · PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Caustic soda flakes/pearls

Synonym(s), Trade name: Caustic soda, Caustic soda flakes, Caustic soda pearls,

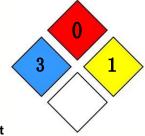
Caustic soda solid, Caustic soda pellets, Caustic soda beads, Caustic alkali, Sodium hydroxide, Sodium hydrate, White soda, Sodium hydroxide flakes, Sodium hydroxide pearls, Sodium

hydroxide pellets, Sodium hydroxide beads, Sodium hydroxide solid.

Chemicals Family: Alkali

NFPA Rating

O-Minimal 1-Slight 2-Moderate 3-Serious 4-Extreme



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

Identified use: Industrial and professional use of sodium hydroxide:

In the pulp and paper industry, production of crop protection, organic pigments, epoxy resins, textile industry, rubber industry, food industry, metal industry, aluminum industry. As a reactant for the manufacturing of chemicals or for neutralization (steel industry, electroplating industry, (waste water), rubber industry, cleaning and water treatment (food industry) or extraction (aluminum industry).

Consumers: Use of sodium hydroxide: Neutralisation, cleaning products, cosmetics, personal care products, batteries.

1.3 Details of the Supplier and the safety data sheet:

Tianjin Jiahengyuan International Trade Co., Limited No. 1023, 10F, Bldg B, HOPSON Junjing Square, Hangyun 1st road, TEDA, Tianjin 300457, China.

86-22-66863746

Web:http://www.jiahengyuanchem.com

1.4 Information phone: 86-(0) 22-66863746

SECTION II · HAZARDOUS INGREDIENTS

2.1 Classification of substance or mixture

Product definition: substance

Classification in accordance with 29 CFR 1910(OSHA HCS) and Regulation EC No. 1272/2008



Skin corrosion - Category 1A[H314]

2.2 Label Elements

Hazard Symbol(s)



Signal Word: Danger

Hazard Statement(s): H314 - Causes skin burns and eye damage

Precautionary Statements

[Prevention] P260 - Do not breathe dust or vapor.

P264 - Wash hands and other skin areas exposed to material thoroughly after handling.

P280 - Wear protective gloves, protective clothing, eye protection and face protection

[Storage] P405 - Store locked up.

[Disposal] P501 - Dispose of contents and containers in accordance with national and local regulations.

2.3 Hazards not otherwise classified(HNOC) or not covered by GHS

None identified

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

% by Weight	Ingredient	CAS Number	EC Number	Annex Number	GHS Classification
>98.5	Sodium hydroxide	1310-73-2	215-185-5	011-002-00-6	H314

There are no ingredients present in this product which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

3.2 Mixtures

Not applicable

SECTION IV - FIRST AID MEASURES

GENERAL: Get medical attention immediately.

INHALATION: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has

stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION: DO NOT INDUCE VOMITING! Provided the patient is conscious, wash out mouth with water and give

200-300 ml (half a pint) of water to drink.

SKIN: Remove affected person from source of contamination. Promptly flush contaminated skin with water.

Promptly remove clothing if soaked through and flush the skin with water. Continue to rinse for

at least $15\ \text{minutes}.$ Get medical attention immediately.

EYES: Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately.

Continue to rinse

SECTION V · FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

This material is not combustible. Use extinguishing media appropriate for surrounding fire.



5.2 SPECIAL FIRE FIGHTING PROCEDURES:

Keep run-off water out of sewers and water sources. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities.

5.3 UNUSUAL FIRE & EXPLOSION HAZARDS:

May develop highly toxic or corrosive fumes if heated. In contact with some metals and water/humid air, hydrogen gas is formed, which may form explosive mixture with air. Contact with some organic chemicals can produce a violent or explosive reaction.

5.4 PROTECTIVE MEASURES IN FIRE:

Self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

SECTION VI · ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTION IN SPILL:

Wear protective clothing and equipment. Keep unprotected persons away. For further information on suitable protective clothing see Section 8 of the safety data sheet "Exposure Controls and Personal Protection".

6.2 PRECAUTIONS TO PROTECT ENVIRONMENT:

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 SPILL CLEANUP METHODS:

DO NOT touch spilled material. Provide ventilation and confine spill. Do not allow runoff to sewer. Collect for reclamation or absorb in vermiculite, dry sand or similar material. Avoid generation and spreading of dust. Flush area with water. Recover the wash water for subsequent disposal. See Section 13, Disposal Considerations, for information regarding the disposal of contained spills.

SECTION VII - HANDLING AND STORAGE

7.1 USAGE PRECAUTIONS:

Avoid spilling, skin and eye contact. Avoid creating dust during use. Wear full protective clothing for prolonged exposure and/or high concentrations. Protective measures during handling are detailed in Section 8 of this Safety Data Sheet.

7.2 STORAGE PRECAUTIONS:

May attack some plastics, rubber and coatings. Keep in cool, dry, ventilated storage and closed containers. Keep containers tightly closed.

7.3 STORAGE CRITERIA:

Corrosive storage.

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

CAS Number	Ingredient	OSHA – PEL	ACGH	NIOSH
1310-73-2	Sodium hydroxide	2 mg/m ³	2 mg/m ³	2 mg/m ³ Ceiling;10 mg/m ³ IDLH



8.2 Exposure controls

PROTECTIVE EQUIPMENT:







VENTILATION:

Provide adequate general and local exhaust ventilation.

RESPIRATORS:

If ventilation is insufficient, suitable respiratory protection must be provided. HiEPF, High-efficiency particulate respirator with full facepiece. SAF, Supplied-air respirator with full facepiece, helmet or hood. SCBAF, Self-contained breathing apparatus with full facepiece.

PROTECTIVE GLOVES:

Use protective gloves made of: Rubber (natural, latex). Neoprene. Nitrile. Polyethylene. Polyvinyl chloride (PVC).

EYE PROTECTION:

Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION:

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact. Impervious clothing, gloves and minimum 8 inches face shield.

HYGIENIC WORK PRACTICES:

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Change work clothing daily if contamination is reasonably probable. Promptly remove non-impervious clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Eating, smoking and water fountains prohibited in immediate work area.

SECTION IX - PHYSICAL AND CHEMICALS PROPERTIES

Appearance Solid.

Colour White.

Odour Odourless.

pH 14. MOL. Weight 40. 01 Melting point 319° C

Initial boiling point and range $1,390^{\circ}$ C (DIN 51751)

Flash point Not applicable.

Flammability (solid, gas) The product is not flammable.

Vapour pressure 3.5 hPa @ 800° C

 $\begin{array}{ccc} \textbf{Density} & 2.\ 13 \ \ \text{g/cm3} \end{array}$

Solubility Soluble in water. 500 g/1 @ 20 $^{\circ}$ C Partition coefficient Not determined.



Viscosity Not applicable.

Explosive properties Not considered to be explosive.

Organic solvents 0.0%

SECTION X · STABILITY AND REACTIVITY

10.1 Reactivity

Reacts vigorously, violently or explosively with many organic and inorganic chemicals. Reactions with metals produce flammable hydrogen gas.

10.2 Chemical stability

Stable under recommended storage conditions, handling and use. Hygroscopic material (readily absorbs moisture from the air and deliquesces).

10.3 Possibility of hazardous reactions

Reacts violently, exothermically and explosively with strong acids, flammable liquids, organic halogens, nitro compounds and amphoteric metals. Hazardous polymerization will not occur.

10.4 Conditions to avoid

Extreme heat, incompatible materials, water, prolonged exposure to air

10.5 Incompatible materials

Metals, acids, flammable liquids, acetone, nitriles, phosphides, halogens, halogen-halogen compounds, chlorinated solvents, ethylene oxide, hydrazine hydrate, hydroxylamine, anhydrides, peroxides, acrolein, acid chlorides, silver salt, hydrogen peroxide, organic nitro compounds, ammonium compounds, organic combustible substances, phenols, water

10.6 Hazardous decomposition products

SECTION XI · TOXICOLOGY

Thermal decomposition products include sodium oxides.

Carcinogenicity: Not NTP listed

Mutagenicity: Not reported to produce mutagenic effects in humans.

Reproductive: Not reported to produce reproductive effects in humans...

Sensitization: Persons with pre-existing skin disorders or eye problems may be more susceptible to this product.

SECTION XII · ECOLOGICAL INFORMATION

MOBILITY: This product will disperse readily in bodies of water or in wet soil.

BIO ACCUMULATION: Does not bioaccumulate.

DEGRADABILITY: This material is inorganic and therefore is not subject to biodegradation.

ACUTE FISH TOXICITY: Concentrations greater than 10 ppm or a pH greater than 10.5 may be toxic to fish and

other aquatic organisms.

WATER HAZARD CLASSIFICATION: UK OCNS group E



Whatever cannot be salvaged should be managed in an appropriate and approved waste disposal facility. Processing use or contamination of this product may alter its waste classification. State and local disposal regulations may differ from federal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV - TRANSPORTATION INFORMATION

US DOT (Domestic Ground Transportation)

Proper Shipping Name: Sodium Hydroxide, solid

Hazard Class: 8

UN/NA: UN1823
Packing Group: II

NAERG: Guide #154

Packaging Authorization: Non-Bulk: 49 CFR 173.212; Bulk: 173.240

Packaging Exceptions: 49 CFR 173.154

IMO/IMDG (Water Transportation)

Proper Shipping Name: Sodium Hydroxide, solid

 Hazard Class:
 8

 UN/NA:
 UN1823

 Packing Group:
 II

 Marine Pollutant:
 No

 EMS Number:
 F-A, S-B

ICAO/IATA (Air Transportation)

Proper Shipping Name: Sodium Hydroxide, solid

Hazard Class: 8 UN/NA: UN1823

Packing Group:

Quantity Limitations: 49 CFR 173.27 and 175.75 - Cargo Aircraft Only: 50 kg; Passenger Aircraft: 15 kg

RID/ADR (Rail Transportation)

Proper Shipping Name: Sodium Hydroxide, solid

Hazard Class: 8
UN/NA: UN1823
Packing Group: II

SECTION XV - REGULATORY INFORMATION

RMP/PSM: Not listed
CERCLA-RQ: 1000 Lbs
EPCRA 311/312: Yes

EPCRA 313: Yes

FIFRA: No documented information available. RCRA-CODE: No Hazardous Waste Identification.

TSCA: Listed

SECTION XVI - REGULATORY INFORMATION

The information contained on this Material Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive nor fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.



