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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Caustic Soda Pearls	**Revision date:** 2026-10-27	**Version:** 1.0	**Brand:** Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Caustic Soda Pearls
Synonyms	Sodium hydroxide pearls
CAS No.	1310-73-2
EC No.	215-185-5
Molecular formula	NaOH
Molecular weight	40.00 g/mol
Relevant identified uses	pH control and alkalinity adjustment in drilling fluids; manufacture of soaps, pulp and paper, textiles; water treatment; chemical processing
Uses advised against	None
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SECTION 2: Hazards identification

GHS Classification	Skin Corr. 1A
Pictogram(s)	GHS05 (Corrosion)
Signal word	Danger
Hazard statement(s)	H314 Causes severe skin burns and eye damage
Precautionary statement(s)	P264 Wash hands thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face

	protection P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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 P405 Store locked up P501 Dispose of contents/container in accordance with local regulations
Other hazards	Reacts violently with water with evolution of heat.

SECTION 3: Composition/information on ingredients

Component	Sodium hydroxide
CAS No.	1310-73-2
EC No.	215-185-5
Classification	Skin Corr. 1A
Concentration (%)	≥99.0 %

SECTION 4: First aid measures

If inhaled	Remove from contaminated area to fresh air. Give oxygen if breathing is difficult. Get medical attention.
In case of skin contact	Wash off with plenty of water. Remove contaminated clothing. Shower thoroughly. Get medical attention.
In case of eye contact	Flush eyes with water for at least 15 minutes, holding eyelids open while washing. Get medical attention immediately.
If swallowed	Do not induce vomiting. Rinse mouth with water. Get medical attention immediately.
Most important symptoms and effects	Causes severe skin burns and serious eye damage.
Indication of any immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	For small fires: dry chemical, CO2, water spray or alcohol-resistant foam. For large fires: water spray or fog.
Unsuitable extinguishing media	None
Special hazards arising from the chemical	Not combustible. May react violently with water with evolution of heat.
Advice for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and full chemical protective clothing. Structural firefighter's protective clothing is NOT effective. Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water from the side until well after the fire is out. Stay away from ends of tanks.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind and keep out of low areas. Provide adequate protective equipment and ventilation.
Environmental precautions	Do not let product enter drains.
Methods and materials for containment and cleaning up	Dilute with plenty of water; the substance may be washed to drain with a lot of water. Use water spray to reduce vapours. Collect residues and dispose of according to local regulations.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Wear suitable protective equipment. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place in tightly closed containers. Keep away from water, moisture and acids.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	ACGIH TLV: 2 mg/m³ (Ceiling); OSHA PEL: TWA 2 mg/m³; NIOSH REL: C 2 mg/m³; IDLH: 10 mg/m³
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Provide adequate ventilation. Eye wash stations and safety showers recommended.
Eye/face protection	Chemical safety goggles and face shield.
Skin protection	Chemical-resistant gloves.
Body protection	Impervious protective clothing and rubber boots.

Respiratory protection	Wear suitable respiratory protection when dust or mist is generated.
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties

Physical state	Pearls (granules)
Colour	White
Odour	Odorless
Melting point / freezing point	323 °C
Boiling point or initial boiling point and boiling range	1388 °C at 760 mmHg
Flammability	Noncombustible solid; contact with water or moisture may generate sufficient heat to ignite combustible materials
Lower and upper explosion limit / flammability limit	Not applicable (non-flammable)
Flash point	Not applicable (non-flammable)
Auto-ignition temperature	Not flammable (USCG, 1999)
Decomposition temperature	No data available
pH	Strongly alkaline; approx. 12 (0.05% w/w solution), 13 (0.5% solution), 14 (5% solution)
Kinematic viscosity	4.0 cP at 350 °C (molten, dynamic viscosity)
Solubility	Soluble in water (with evolution of heat)
Partition coefficient n-octanol/water	Not applicable (inorganic)
Vapour pressure	0 mmHg (approx.) at room temperature (NIOSH); 1 Pa at 513 °C
Density and/or relative density	2.13 g/cm3 at 20 °C
Relative vapour density	Not applicable
Particle characteristics	No data available

SECTION 10: Stability and reactivity

Reactivity	Strong base; reacts rapidly and exothermically with acids; absorbs carbon dioxide and moisture from air (deliquescent); attacks aluminium, tin and zinc with evolution of flammable hydrogen gas; dissolution/dilution in water liberates heat

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	The solution in water is a strong base. It reacts violently with acid and is corrosive to metals such as aluminium, tin, lead and zinc; this produces combustible/explosive hydrogen gas. Reacts with ammonium salts producing ammonia (fire hazard). Contact with moisture and water generates heat. (ICSC 0360)
Conditions to avoid	Contact with water or moisture; heat.
Incompatible materials	Acids, water/moisture, metals (e.g. aluminum, zinc and tin).
Hazardous decomposition products	No hazardous decomposition products under normal conditions

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 (rat, oral): 140-340 mg/kg; LD50 (rabbit, dermal): 1,350 mg/kg; LD50 (mouse, intraperitoneal): 40 mg/kg
Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not classified (based on available data)
Germ cell mutagenicity	Not classified (based on available data)
Carcinogenicity	Not classified (based on available data)
Reproductive toxicity	Not classified (based on available data)
STOT - single exposure	Not classified (based on available data)
STOT - repeated exposure	Not classified (based on available data)
Aspiration hazard	Not classified (based on available data)

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	EC50 (Ceriodaphnia dubia, 48 h): 40.38 mg/L; LC50 (Carassius auratus, 24 h): 160 mg/L; LC50 (Poecilia reticulata, 24 h): 209 mg/L
Persistence and degradability	BOD: none (inorganic substance)
Bioaccumulative potential	Not applicable (inorganic substance)
Mobility in soil	Spilled solid dissolves in precipitation and can infiltrate soil as an alkaline solution
Other adverse effects	None known

SECTION 13: Disposal considerations

Product disposal methods	Dilute with plenty of water and dispose of in accordance with local regulations.
Contaminated packaging	Dispose of as unused product in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	1823
UN Proper Shipping Name	Sodium hydroxide, solid
Transport hazard class(es)	8
Packing group	II
Environmental hazards (Marine pollutant)	No
Special precautions for user	Keep containers upright, closed and secured during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS (EU): Listed (215-185-5); TSCA (USA): Listed; IECSC (China): Listed; China Catalog of Hazardous Chemicals 2015: Listed

SECTION 16: Other information

Full text of H-Statements	H314 Causes severe skin burns and eye damage
Revision date	2026-10-27
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.