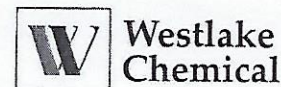


SAFETY DATA SHEET



PELS® Caustic Soda Beads

Section 1. Identification

GHS product identifier : PELS® Caustic Soda Beads
Product code : Not available.
Other means of identification : Anhydrous Sodium Hydroxide; Caustic Soda; NaOH; PELS® Plus Caustic Soda Beads; Sodium Hydroxide
Product type : Solid.

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

Product use : Chemical reagent.
Area of application : Industrial applications.

Manufacturer : Axiall, LLC
Westlake Vinyls, Inc.
Westlake Vinyls Company LP
2801 Post Oak Blvd
Suite 600
Houston, TX 77056
United States Telephone:+1-713-960-9111
www.westlake.com

e-mail address of person responsible for this SDS : sdsinfo@westlake.com

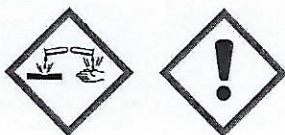
Emergency telephone number (with hours of operation) : CHEMTREC USA 24 Hrs: 1-800-424-9300

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : H314 SKIN CORROSION - Category 1A
H318 SERIOUS EYE DAMAGE - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 - Causes severe skin burns and eye damage.
H335 - May cause respiratory irritation.

Precautionary statements

Date of issue/Date of revision : 09/17/2020 Date of previous issue : 07/13/2020 Version : 1.01 1/14

Section 2. Hazards identification

| | |
|----------------------------------|---|
| Prevention | : P280 - Wear protective gloves or clothing. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe dust. P264 - Wash hands thoroughly after handling. P363 - Wash contaminated clothing before reuse. |
| Response | : P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 - Immediately call a POISON CENTER or doctor. 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 or 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. P321 - Specific treatment (see First Aid instruction). |
| Storage | : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. |
| Disposal | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | : Do not taste or swallow. Wash thoroughly after handling. |
| Hazards not otherwise classified | : Causes severe digestive tract burns. |

Section 3. Composition/information on ingredients

| | |
|-------------------------------|---|
| Substance/mixture | : Substance |
| Other means of identification | : Anhydrous Sodium Hydroxide; Caustic Soda; NaOH; PELS® Plus Caustic Soda Beads; Sodium Hydroxide |

CAS number/other identifiers

CAS number : Not applicable.

| Ingredient name | Other names | % | CAS number |
|------------------|-------------|----------|------------|
| sodium hydroxide | - | 95 - 100 | 1310-73-2 |
| sodium chloride | - | 0 - 2 | 7647-14-5 |
| sodium carbonate | - | 0 - 2 | 497-19-8 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Section 4. First aid measures

Description of necessary first aid measures

| | |
|-------------|--|
| Eye contact | : In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| Inhalation | : If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If not breathing, give artificial respiration. Move exposed person to fresh air. |

Section 2. Hazards identification

| | |
|----------------------------------|---|
| Prevention | : P280 - Wear protective gloves or clothing. P271 - Use only outdoors or in a well-ventilated area. P260 - Do not breathe dust. P264 - Wash hands thoroughly after handling. P363 - Wash contaminated clothing before reuse. |
| Response | : P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 - Immediately call a POISON CENTER or doctor. 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 or 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. P321 - Specific treatment (see First Aid instruction). |
| Storage | : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. |
| Disposal | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | : Do not taste or swallow. Wash thoroughly after handling. |
| Hazards not otherwise classified | : Causes severe digestive tract burns. |

Section 3. Composition/information on ingredients

| | |
|-------------------------------|---|
| Substance/mixture | : Substance |
| Other means of identification | : Anhydrous Sodium Hydroxide; Caustic Soda; NaOH; PELS® Plus Caustic Soda Beads; Sodium Hydroxide |

CAS number/other identifiers

CAS number : Not applicable.

| Ingredient name | Other names | % | CAS number |
|------------------|-------------|----------|------------|
| sodium hydroxide | - | 95 - 100 | 1310-73-2 |
| sodium chloride | - | 0 - 2 | 7647-14-5 |
| sodium carbonate | - | 0 - 2 | 497-19-8 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Section 4. First aid measures

Description of necessary first aid measures

| | |
|-------------|--|
| Eye contact | : In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| Inhalation | : If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If not breathing, give artificial respiration. Move exposed person to fresh air. |

Section 4. First aid measures

- Skin contact** : For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing.
- Ingestion** : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. If swallowed then seek immediate medical assistance.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage. Direct contact with the eyes can cause irreversible damage, including blindness.
- Inhalation** : May cause corrosive burns - irreversible damage.
- Skin contact** : Causes severe burns.
- Ingestion** : Severely corrosive to the digestive tract. Causes severe burns. May cause irreversible damage to mucous membranes.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

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

- Notes to physician** : All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : SMALL FIRE: dry chemical, carbon dioxide or water spray
LARGE FIRE: Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Hot containers may explode.

Hazardous thermal decomposition products : Depending on conditions, hazardous combustion products may include the following materials: Sodium monoxide, halogenated compounds, metal oxide/oxides

Special protective actions for fire-fighters : Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
SMALL FIRE: Move containers from fire area if this can be done without risk.

Special protective equipment for fire-fighters : Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : Do not touch or walk through spilled material. Wear appropriate personal protective equipment; avoid direct contact. Do not touch damaged container or spilled material. Ventilate the area before entry.
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak for at least 50 meters (150 feet) in all directions. Stay upwind/keep distance from source. Keep out of low areas. Do not allow water to enter container. Keep unauthorized personnel away.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Avoid dust generation. Carefully shovel or sweep up spilled material and place in suitable container.

Large spill : Avoid dust generation. Carefully shovel or sweep up spilled material and place in suitable container. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Handle and open container with care. Use only with adequate ventilation. Wear appropriate personal protective equipment. Avoid direct contact with the human body. Do not breathe dust. Do not get in eyes, on skin or on clothing. Do not ingest. Add this product only to water. Never add water to this product. Do not add to warm or hot water, a violent eruption or explosive reaction can result. Avoid contact with organic materials. Take any precaution to avoid mixing with strong acids. May cause fire or explosion. When making solutions or diluting, only add caustic soda slowly to surface of cold water while stirring. Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Caustic soda may react with various sugars to generate carbon monoxide. Hazardous carbon monoxide gas can form upon contact with food and beverage products in enclosed vessels and can cause death. Follow appropriate tank entry procedures (see ANSI Z117.1 - 2009 Safety Requirements for Confined Spaces). Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Ventilate the area before entry. Keep only in the original container. Keep container tightly closed. Keep away from incompatibles. Store in a dry, cool and well-ventilated area. User should ensure that equipment and procedures are in place to ensure safe handling of the caustic at temperatures involved, which may include the need to heat or maintain temperature of the material. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------|---|
| sodium hydroxide | ACGIH TLV (United States, 3/2019). C: 2 mg/m ³ NIOSH REL (United States, 10/2016). CEIL: 2 mg/m ³ OSHA PEL (United States, 5/2018). TWA: 2 mg/m ³ 8 hours. |
| sodium chloride | None. |
| sodium carbonate | None. |

Appropriate engineering controls : Good general ventilation should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Environmental exposure controls : Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Individual protection measures

Date of issue/Date of revision : 09/17/2020 Date of previous issue : 07/13/2020 Version : 1.01 5/14

Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Wear chemical splash goggles and face shield.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Dustless granules.]
- Color** : White.
- Odor** : Odorless.
- Odor threshold** : Not available.
- pH** : Strongly basic.
- Melting point** : 310 to 320°C (590 to 608°F)
- Boiling point** : 1390°C (2534°F)
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 2.13 [Water = 1]
- Density** : Not available.
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Solubility in water** : 100%
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.

Section 9. Physical and chemical properties

Decomposition temperature : Not available.
 SADT : Not available.
 Viscosity : Not available.
 Flow time (ISO 2431) : Not available.

Section 10. Stability and reactivity

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is stable under normal conditions.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
 Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid : Avoid excessive heat. Incompatible materials

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids. Reactive or incompatible with the following materials: metals (Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Metals: Magnesium. Aluminum. Zinc. tin. Chromium Compounds. copper, bronze, brass), acids, organic materials (May cause fire or explosion.), food sugars (Caustic soda may react with various sugars to generate carbon monoxide.), water (Aqueous reaction with caustic soda can generate heat (strongly exothermic).)

Hazardous decomposition products : Decomposition products may include the following materials: carbon oxides, halogenated compounds, metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------|---------|------------|----------|
| sodium chloride | LD50 Oral | Rat | 3000 mg/kg | - |
| sodium carbonate | LD50 Oral | Rat | 4090 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|------------------|-------------|
| sodium hydroxide | Eyes - Mild irritant | Rabbit | - | 400 ug | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 50 ug | - |
| | Eyes - Severe irritant | Rabbit | - | 1 % | - |
| | Eyes - Severe irritant | Rabbit | - | 0.5 minutes 1 mg | - |
| sodium chloride | Skin - Severe irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |

Section 11. Toxicological information

| | | | | | |
|------------------|--------------------------|--------|---|--------------------|---|
| sodium carbonate | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 50 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|------------------|------------|-------------------|------------------------------|
| sodium hydroxide | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

- Eye contact** : Causes serious eye damage. Direct contact with the eyes can cause irreversible damage, including blindness.
- Inhalation** : May cause corrosive burns - irreversible damage.
- Skin contact** : Causes severe burns.
- Ingestion** : Severely corrosive to the digestive tract. Causes severe burns. May cause irreversible damage to mucous membranes.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
- Ingestion** : Adverse symptoms may include the following:
 stomach pains

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

Short term exposure

- Potential immediate effects** : Inhalation
 Acute: May cause corrosive burns - irreversible damage.
 Skin
 Acute: Causes severe skin burns and eye damage.
 Eye
 Acute: Causes serious eye damage. Direct contact with the eyes can cause irreversible damage, including blindness.
 Ingestion
 Acute: Material is destructive to tissue of the mucous membranes and upper respiratory tract.
- Potential delayed effects** : Inhalation
 Chronic: Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.
 Skin
 Chronic: Repeated or prolonged exposure to corrosive materials will cause dermatitis.
 Eyes
 Chronic: Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.
 Ingestion
 Chronic: Can cause gastrointestinal disturbances.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| PELS® Caustic Soda Beads | 3381.1 | N/A | N/A | N/A | N/A |
| sodium chloride | 3000 | N/A | N/A | N/A | N/A |
| sodium carbonate | 4090 | N/A | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-------------------------------------|---|----------|
| sodium hydroxide | Acute EC50 40.38 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| sodium chloride | Acute LC50 125 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |
| | Acute EC50 2430000 µg/l Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute EC50 519.6 mg/l Fresh water | Crustaceans - Cypris subglobosa | 48 hours |
| | Acute EC50 402.6 mg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute IC50 6.87 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Acute LC50 1000000 µg/l Fresh water | Fish - Morone saxatilis - Larvae | 96 hours |
| | Chronic LC10 781 mg/l Fresh water | Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) | 3 weeks |
| sodium carbonate | Chronic NOEC 6 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Chronic NOEC 0.314 g/L Fresh water | Daphnia - Daphnia pulex | 21 days |
| | Chronic NOEC 100 mg/l Fresh water | Fish - Gambusia holbrooki - Adult | 8 weeks |
| | Acute EC50 242000 µg/l Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute LC50 176000 µg/l Fresh water | Crustaceans - Amphipoda | 48 hours |
| | Acute LC50 265000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 300000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |

Conclusion/Summary : Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Water Solubility (g/l): Soluble




Other adverse effects : No studies have been found.

Section 13. Disposal considerations

Disposal methods : Product waste: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Packaging waste: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 14. Transport information

Section 14. Transport information

| | DOT Classification | IMDG | IATA |
|----------------------------|--|--|--|
| UN number | UN1823 | UN1823 | UN1823 |
| UN proper shipping name | Sodium hydroxide, solid | SODIUM HYDROXIDE, SOLID | Sodium hydroxide, solid |
| Transport hazard class(es) | 8  | 8  | 8  |
| Packing group | II | II | II |
| Environmental hazards | No. | No. | No. |

Additional information

DOT Classification : **Reportable quantity** 1039.3 lbs / 471.85 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

Limited quantity Yes.

Packaging instruction Exceptions: 154. Non-bulk: 212. Bulk: 240.

Quantity limitation Passenger aircraft/rail: 15 kg. Cargo aircraft: 50 kg.

Special provisions IB8, IP2, IP4, T3, TP33

IMDG : **Emergency schedules** F-A, S-B

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 15 kg. Packaging instructions: 859. Cargo Aircraft Only: 50 kg. Packaging instructions: 863. Limited Quantities - Passenger Aircraft: 5 kg. Packaging instructions: Y844.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 5(a)2 final significant new use rules:** mercury
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are active or exempted.
Clean Water Act (CWA) 307: Nickel powder; mercury
Clean Water Act (CWA) 311: sodium hydroxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

Section 15. Regulatory information

DEA List I Chemicals : Not listed
(Precursor Chemicals)

DEA List II Chemicals : Not listed
(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SKIN CORROSION - Category 1A
SERIOUS EYE DAMAGE - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
HNOC - Corrosive to digestive tract [severe]

Composition/information on ingredients

| Name | % | Classification |
|------------------|----------|---|
| sodium hydroxide | 95 - 100 | CORROSIVE TO METALS - Category 1 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 HNOC - Corrosive to digestive tract [severe] |
| sodium chloride | 0 - 2 | EYE IRRITATION - Category 2A |
| sodium carbonate | 0 - 2 | EYE IRRITATION - Category 2A |

SARA 313

| | Product name | CAS number | % |
|---------------------------------|-------------------|------------|------|
| Form R - Reporting requirements | mercury | 7439-97-6 | <0.1 |
| Supplier notification | : Not applicable. | | |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: SODIUM HYDROXIDE
New York : The following components are listed: Sodium hydroxide
New Jersey : The following components are listed: SODIUM HYDROXIDE; CAUSTIC SODA
Pennsylvania : The following components are listed: SODIUM HYDROXIDE

California Prop. 65

⚠ Although Liquid Caustic Soda is not sold directly to consumers, this product can expose you to chemicals which are known to the State of California to cause cancer, and are known to the State of California to cause birth defects or other reproductive harm. Please contact your customer service representative for details.

| Ingredient name | No significant risk level | Maximum acceptable dosage level |
|-------------------------------|---------------------------|---------------------------------|
| Nickel | - | - |
| Mercury and mercury compounds | - | - |

International regulations

Date of issue/Date of revision : 09/17/2020 Date of previous issue : 07/13/2020 Version : 1.01 12/14

Section 15. Regulatory information

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Other special considerations : NSF® Standard 60 Drinking Water Treatment Chemicals – PELS™ Caustic Soda Beads and PELS™ Plus Caustic Soda Beads have Health Effect Listing and are certified for maximum use of 100 mg/l.

Hazardous Material Information System (U.S.A.)

| | | |
|------------------|---|---|
| Health | / | 4 |
| Flammability | | 0 |
| Physical hazards | | 0 |
| | | |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

| Classification | Justification |
|--|--------------------|
| SKIN CORROSION - Category 1A | Calculation method |
| SERIOUS EYE DAMAGE - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method |

History

Date of issue/Date of revision : 09/17/2020
 Date of previous issue : 07/13/2020
 Version : 1.01

Section 16. Other information

- Prepared by : Sphera Solutions
- Key to abbreviations : ATE = Acute Toxicity Estimate
AMP = Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations
- References : HCS (U.S.A.)- Hazard Communication Standard
International transport regulations

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.