Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • **Caustic Soda Beads**

Synonyms • Anhydrous Sodium Hydroxide; Caustic Soda; NaOH; PELS® Caustic Soda Beads; PELS® Plus Caustic Soda Beads; Sodium Hydroxide

CAS Number • 1310-73-2

EC Number • 215-185-5

Molecular Formula • :H 1:O 1:Na 1:

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

Relevant identified use(s) • Chemical reagent; Industrial uses

1.3 Details of the supplier of the safety data sheet

Manufacturer • Axiall, LLC

1000 Abernathy Rd. NE, Suite 1200
Atlanta, GA 30328
United States
www.axiall.com
msdsinfo@axiall.com

Telephone (General) • +1 225-685-1240

Responsible Party - EU • Intertek France

12 Rue Alfred Kastler
71530 Fragnes
France

christian.gimenez@intertek.com

Telephone (General) • 33 (0) 385 99 1274

Telephone (General) • 33 385 99 1288 - Fax

1.4 Emergency telephone number

Manufacturer • +1 304-455-6882

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Skin Corrosion 1A - H314

DSD/DPD • Corrosive (C)

R35

2.2 Label Elements

CLP

DANGER

Hazard statements

- H314 - Causes severe skin burns and eye damage.

Precautionary statements

Prevention

- P260 - Do not breathe dust.
  P264 - Wash thoroughly after handling.
  P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  P310 - Immediately call a POISON CENTER or doctor/physician.
  P363 - Wash contaminated clothing before reuse.
  P321 - Specific treatment, see supplemental first aid information.
  P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage/Disposal

- P405 - Store locked up.
  P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD

Risk phrases

- R35 - Causes severe burns.

Safety phrases

- S36 - Wear suitable protective clothing.
  S37 - Wear suitable gloves.
  S39 - Wear eye/face protection.
  S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other Hazards

CLP

- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD

- This product is considered dangerous according to the European Directive 67/548/EEC.

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

UN GHS

- Skin Corrosion 1A - H314
  Serious Eye Damage 1 - H318

2.2 Label elements

UN GHS

DANGER

Hazard statements
- H314 - Causes severe skin burns and eye damage.
  H318 - Causes serious eye damage

Precautionary statements

Prevention
- P260 - Do not breathe .
  P264 - Wash thoroughly after handling.
  P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  P363 - Wash contaminated clothing before reuse.
  P321 - Specific treatment, see supplemental first aid information.
  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/physician.
  P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage/Disposal
- P405 - Store locked up.
  P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

UN GHS
- According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012
- Skin Corrosion 1A - H314
  Serious Eye Damage 1 - H318

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements
- Causes severe skin burns and eye damage. - H314
  Causes serious eye damage - H318

Precautionary statements

Prevention
- Do not breathe dust. - P260
  Wash thoroughly after handling. - P264
  Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - P303+P361+P353
  Wash contaminated clothing before reuse. - P363
  Specific treatment, see supplemental first aid information. - P321
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
  Immediately call a POISON CENTER or doctor/physician. - P310
  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. - P301+P330+P331

Storage/Disposal
- Store locked up. - P405
  Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

OSHA HCS 2012
- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS
- Corrosive - E

2.2 Label elements

WHMIS

- Corrosive - E

2.3 Other hazards

WHMIS
- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

Composition				
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**
Sodium hydroxide	**CAS:**1310-73-2 **EC Number:**215-185-5 **EU Index:**011-002-00-6	96% TO 100%	NDA	**UN GHS:** Skin Corr. 1B; Eye Dam. 1 **EU DSD/DPD:** Annex VI, Table 3.2: C R35 **EU CLP:** Annex VI, Table 3.1: Skin Corr. 1A, H314 **OSHA HCS 2012:** Skin Corr. 1B; Eye Dam. 1
Sodium chloride	**CAS:**7647-14-5 **EC Number:**231-598-3	0% TO 2%	Ingestion/Oral-Rat LD50 • 3000 mg/kg	**UN GHS:** Eye Irrit. 2; Skin Irrit. 3; Acute Tox. 5 (oral) **EU DSD/DPD:** Self Classified: Xi R36 **EU CLP:** Self Classified: Eye Irrit. 2, H319 **OSHA HCS 2012:** Eye Irrit. 2
Sodium carbonate (2:1)	**CAS:**497-19-8 **EC Number:**207-838-8 **EU Index:**011-005-00-2	0% TO 2%	Ingestion/Oral-Rat LD50 • 4090 mg/kg Inhalation-Rat LC50 • 2300 mg/m³ 2 Hour(s)	**UN GHS:** Eye Irrit. 2; Acute Tox 5 (oral) **EU DSD/DPD:** Annex VI, Table 3.2: Xi R36 **EU CLP:** Annex VI, Table 3.1: Eye Irrit. 2, H319 **OSHA HCS 2012:** Eye Irrit. 2

3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Administer oxygen if breathing is difficult. 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. Give artificial respiration if victim is not breathing. Move victim to fresh air.

Skin
- 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.

Eye
- 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.

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. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

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.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- SMALL FIRES: Dry chemical or carbon dioxide.
  LARGE FIRES: Dry chemical, carbon dioxide, alcohol-resistant foam or water spray.

Unsuitable Extinguishing Media
- No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Containers may explode when heated.

Hazardous Combustion Products
- Decomposition products may include the following materials: carbon oxides; halogenated compounds; metal oxide/oxides.

5.3 Advice for firefighters

- 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.
  Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
  Wear positive pressure self-contained breathing apparatus (SCBA).
  SMALL FIRES: Move containers from fire area if you can do it without risk.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Do not walk through spilled material. Wear appropriate personal protective equipment,

avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate the area before entry.

Emergency Procedures

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Do not get water inside container.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Avoid generating dust.
  Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Handle and open container with care. Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. 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. May cause fire or explosion. Avoid contact with organic materials. Take any precaution to avoid mixing with strong acids. 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. 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.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Ventilate enclosed areas. Keep only in the original container. Keep container tightly closed. Keep away from incompatible materials. Store in a cool, dry, well-ventilated place.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Canada British Columbia**	**Canada Ontario**	**Canada Quebec**	**NIOSH**
Sodium hydroxide (1310-73-2)	Ceilings	2 mg/m3 Ceiling	2 mg/m3 Ceiling	2 mg/m3 Ceiling	2 mg/m3 Ceiling	2 mg/m3 Ceiling

Exposure Limits/Guidelines (Con't.)		
	Result	**OSHA**
Sodium hydroxide (1310-73-2)	TWAs	2 mg/m3 TWA

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- 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.

Eye/Face

- Wear chemical splash goggles and face shield.

Skin/Body

- 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. HANDS: 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.

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.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
TWAEV = Time-Weighted Average Exposure Value
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White dustless granules with no odor.
Color	White	Odor	Odorless
Odor Threshold	No data available		
General Properties			
Boiling Point	1390 C(2534 F)	Melting Point	310 to 320 C(590 to 608 F)
Decomposition Temperature	No data available	pH	Strongly basic
Specific Gravity/Relative Density	2.13 Water=1	Water Solubility	100 %
Viscosity	No data available	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	Volatiles (Wt.)	0 %
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			

Octanol/Water Partition coefficient	No data available		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

- Under normal conditions of storage and use, hazardous polymerization will not occur.

10.4 Conditions to avoid

- Incompatible materials. Excess heat.

10.5 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.), 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).

10.6 Hazardous decomposition products

- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Sodium hydroxide (96% TO 100%)	1310-73-2	**Irritation:** Eye-Monkey • 1 % 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Severe irritation
Impurities, Stabilizers, etc...		
Sodium carbonate (2:1) (0% TO 2%)	497-19-8	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 4090 mg/kg; Inhalation-Rat LC50 • 2300 mg/m³ 2 Hour(s); *Lungs, Thorax, or Respiration*:**Dyspnea**; *Gastrointestinal*:**Other changes**; **Irritation:** Eye-Rabbit • 50 mg • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation; **Multi-dose Toxicity:** Inhalation-Rat TCLo • 16.2 mg/m³ 16 Week(s)-Intermittent; *Sense Organs and Special Senses:Olfaction*:**Change in sensation of smell**; *Lungs, Thorax, or Respiration*:**Emphysema**; *Immunological Including Allergic*:**Decrease in cellular immune response**
Sodium chloride (0% TO 2%)	7647-14-5	**Irritation:** Eye-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation; **Multi-dose Toxicity:** Ingestion/Oral-Rat TDLo • 201.6 g/kg 6 Week(s)-Intermittent; *Vascular*:**BP elevation not characterized in autonomic section**; **Mutagen:** Unscheduled DNA synthesis • Ingestion/Oral-Rat • 16800 mg/kg 4 Week(s)-Continuous; **Reproductive:** Ingestion/Oral-Rat TDLo • 56400 mg/kg (5D pre-21D post); *Reproductive Effects:Maternal Effects*:**Postpartum**; *Reproductive Effects:Effects on Newborn*:**Biochemical and metabolic**

GHS Properties	Classification

Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Aspiration Hazard	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Carcinogenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Germ Cell Mutagenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Skin corrosion/Irritation	**EU/CLP** • Skin Corrosion 1A **OSHA HCS 2012** • Skin Corrosion 1B **UN GHS** • Skin Corrosion 1B
Skin sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
STOT-RE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
STOT-SE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Toxicity for Reproduction	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Respiratory sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met **UN GHS** • Classification criteria not met
Serious eye damage/Irritation	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Serious Eye Damage 1 **UN GHS** • Serious Eye Damage 1

Route(s) of entry/exposure
- Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)
- May cause corrosive burns - irreversible damage.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.

Skin

Acute (Immediate)
- Causes severe skin burns.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials will cause dermatitis.

Eye

Acute (Immediate)
- Causes serious eye damage. Direct contact with the eyes can cause irreversible damage, including blindness.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.

Ingestion

Acute (Immediate)
- May cause irreversible damage to mucous membranes.

Chronic (Delayed)
- Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal distrubances.

Key to abbreviations

LD = Lethal Dose
MLD = Mild
SEV = Severe
TC = Toxic Concentration
TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

Caustic Soda Beads			1310-73-2		
Dosage	**Species**	**Duration**	**Results**	**Exposure Conditions**	**Comments**
= 40.4 mg/L	**Water Flea:** Ceriodaphnia dubia	48 Hour(s)	EC50	Fresh water	NDA
33000 to 100000 µg/L	**Crustacea:** Crangon - adult	48 Hour(s)	LC50	Marine water	NDA
= 125000 µg/L	**Fish:** Gambusia affinis - Adult	96 Hour(s)	LC50	Fresh water	NDA
= 56 mg/L	**Fish:** Poecilia reticulata - Young	96 Hour(s)	NOEC	Marine water	NDA
= 196 mg/L	**Fish:** Guppy - Poecilia reticulata	96 Hour(s)	LC50	Marine water	NDA
= 56 mg/L	**Fish:** Guppy - Poecilia reticulata	96 Hour(s)	NOEC	Marine water	NDA

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Water solubility: Soluble.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1823	Sodium hydroxide, solid	8	II	NDA
TDG	UN1823	SODIUM HYDROXIDE, SOLID	8	II	NDA
IMO/IMDG	UN1823	SODIUM HYDROXIDE, SOLID	8	II	NDA
IATA/ICAO	UN1823	Sodium hydroxide, solid	8	II	NDA

14.6 Special precautions for user
- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
- Acute

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**EU EINECS**	**EU ELNICS**	**TSCA**
Sodium carbonate (2:1)	497-19-8	Yes	No	Yes	No	Yes
Sodium chloride	7647-14-5	Yes	No	Yes	No	Yes
Sodium hydroxide	1310-73-2	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Sodium hydroxide	1310-73-2	E (including 0.04% in aqueous solution, 0.08%, 0.4% in aqueous solution, 2%, 2.5%, 4% in aqueous solution, 5%, 10%, 16%, 20%, 40%, 50% in aqueous solution, 8.7N)
• Sodium chloride	7647-14-5	Uncontrolled product according to WHMIS classification criteria
• Sodium carbonate (2:1)	497-19-8	D2B, E

Canada - WHMIS - Ingredient Disclosure List

• Sodium hydroxide	1310-73-2	1 %
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	1 %

Environment

Canada - CEPA - Priority Substances List

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Sodium hydroxide	1310-73-2	1000 lb final RQ; 454 kg final RQ
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Sodium hydroxide	1310-73-2	Not Listed
• Sodium chloride	7647-14-5	Not Listed
• Sodium carbonate (2:1)	497-19-8	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H319 - Causes serious eye irritation

  R36 - Irritating to eyes.

Last Revision Date
- 17/June/2014

Preparation Date
- 12/May/2014

Other Information
- 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.

Disclaimer/Statement of Liability
- The technical data given herein is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. No guarantee

is being given as to the end use performance. The product is sold on the basis that buyers test the product for their specific purposes. This information related to the material designated and may not be valid for such material used in combination with any other materials or in any process.

Key to abbreviations

NDA = No Data Available