

SAFETY DATA SHEET

REV. 0 Issued: March 6, 2015

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION

Product identifier	Potassium Hydroxide Solution
Other means of identification	
Synonyms	Caustic potash solution, KOH, Potash lye, Lye, Lye solution, aqueous alkali metal hydroxide
Recommended use	Manufacture of biodiesel, soft soaps, fine chemicals, fertilizers, electrolyte for batteries.
Recommended restrictions	None known
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	ERCO Worldwide
Address	302 The East Mall Suite 200 Toronto, ON M9B 6C7 Canada
Telephone	Information #: (416) 239-7111 (Monday – Friday 8:00 am – 5:00pm EST)
Website	http://www.ercoworldwide.com
E-mail	productinfo@ercoworldwide.com
Emergency phone number	24 Hr. #: Canada: 613-996-6666 (CANUTEC) USA: 1-800-424-9300 (CHEMTREC)
Supplier	Refer to Manufacturer

2. HAZARD(S) IDENTIFICATION

Physical hazards	Corrosive to metals	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Not currently regulated by OSHA, refer to Section 12 for additional information.	
OSHA defined hazards	This mixture does not meet the classification criteria according to OSHA HazCom 2012.	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation.
Precautionary statement	
Prevention	Do not breathe mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/clothing and eye/face protection.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	No OSHA defined hazard classes. Other hazards which do not result in classification: Contact with most metals will generate flammable hydrogen gas. Contact with water will generate considerable heat. Reacts vigorously or violently with many organic and inorganic chemicals such as: acids, acrolein, acrylonitrile, chlorinated hydrocarbons (e.g. 1,2 dichloroethylene), chlorine dioxide, maleic anhydride, nitroethane, nitroparaffins, 2-nitrophenol, nitropropane, phosphorus, potassium persulfate, and tetrahydrofuran (containing peroxides). Chronic skin contact with low concentrations may cause dermatitis.
Supplemental information	Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Potassium Hydroxide	Caustic Potash Potassium Hydrate Lye Potash Potash Lye	1310-58-3	50 or less
Water	Dihydrogen oxide	7732-18-5	50 or less

4. FIRST-AID MEASURES

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Take off immediately all contaminated clothing. Immediately flush skin with running water for at least 20 minutes. Cover wound with sterile dressing. Do not rub area of contact. Wash contaminated clothing before reuse. Leather and shoes that have been contaminated with the solution may need to be destroyed. Call a physician or poison control center immediately.

Eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the unaffected eye or onto the face. Call a physician or Poison Control Center immediately.

Ingestion

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed

Inhalation of mists can cause severe respiratory irritation. Symptoms may include coughing, choking and wheezing. Inhalation could result in pulmonary edema (fluid accumulation).

Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. Corrosive to the eyes and may cause severe damage including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May be harmful or fatal if swallowed. May cause severe irritation and corrosive damage in the mouth,

throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding and eventually death.

Indication of immediate medical attention and special treatment needed

Immediate medical attention is required. Causes chemical burns. May be harmful or fatal if swallowed. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use as appropriate: Water Spray or Fog. Alcohol resistant foam. Dry chemical powder. Use water with caution. Contact with water will generate considerable heat.

Unsuitable extinguishing media

Carbon dioxide (CO₂).

Use chemical extinguishing agents with caution. Some chemical extinguishing agents may react with this material.

Specific hazards arising from the chemical

Not considered flammable. Contact with most metals will generate flammable hydrogen gas. Contact with water will generate considerable heat. The heat that is generated may be sufficient enough to ignite nearby combustible materials. Reacts vigorously or violently with many organic and inorganic chemicals such as: acids, acrolein, acrylonitrile, chlorinated hydrocarbons (e.g. 1,2 dichloroethylene), chlorine dioxide, maleic anhydride, nitroethane, nitroparaffins, 2-nitrophenol, nitropropane, phosphorus, potassium persulfate, and tetrahydrofuran (containing peroxides). Toxic fumes, gases or vapours may evolve on burning.

Special protective equipment and precautions for firefighters

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn.

Fire-fighting equipment/instructions

Fight fire with normal precautions from a reasonable distance. Evacuate the area promptly. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Hazardous combustion products

None known.

In the event of fire the following can be released: Potassium oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Ventilate the area. Remove sources of ignition. Stop leak if you can do so without risk. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift.

Small Spills: Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Dilute alkali with water and neutralize with acids (e.g. acetic acid / vinegar).

Large Spills: Prevent entry into waterways, sewer, basements or confined areas. If not recoverable, dilute with water or flush to holding area and neutralize. Remove with vacuum trucks or pump to storage/salvage vessels. Contact the proper local authorities.

Never return spills to original containers for re-use. Contaminated absorbent material may pose the same hazards as the spilled product. For waste disposal, see Section 13.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear chemically resistant protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Do not breathe mist. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Keep away from heat. Keep away from metals and other incompatibles. When preparing or diluting solution, always add to water, slowly and with stirring. Use cold water to prevent excessive heat generation. Never add water to the

product. Label containers appropriately. Wash thoroughly after handling. When using, do not eat, drink or smoke. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Store away from incompatible materials (see Section 10 of the SDS). Store in original tightly closed container. Store in corrosive resistant container with a resistant inner liner.

Suitable container and packaging materials for safe storage: Polyvinyl chloride (PVC). Polypropylene. Polytetrafluoroethylene (PTFE). Mild steel may be used if the storage temperature does not exceed 50°C (122°F). For temperatures above 50°C (122°F), materials such as nickel or lined steel may be required.

Aluminum equipment should not be used for storage and/or transfer.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Potassium Hydroxide (CAS 1310-58-3)	Ceiling	2 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Potassium Hydroxide (CAS 1310-58-3)	TWA	2 mg/m ³

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Chemical goggles and face shield are recommended.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Wear as appropriate: Butyl rubber. Neoprene. Nitrile, Polyvinyl chloride (PVC), Viton rubber (fluor rubber). Advice should be sought from glove suppliers.

Other

Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH/MSHA approved air-purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may be used to reduce exposure. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Do not breathe mist. Avoid contact with eyes, skin and clothing. When using, do not eat, drink or smoke. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to white/light gray, viscous liquid
Physical state	Liquid
Form	Viscous liquid
Color	Clear to white/light gray
Odor	Odorless.
Odor threshold	Not Available
pH	> 14 (at high alkali concentration in water pH scale is not applicable)
Melting point/freezing point	39.2 °F (4 °C) (50% solution) -22 °F (-30 °C) (45% solution)
Initial boiling point and boiling range	269.6 °F (132 °C) (45% solution) 289.4 °F (143 °C) (50% solution)
Flash point	Not Applicable (does not burn)
Evaporation rate	Not Available
Flammability (solid, gas)	Not Applicable

Upper/lower flammability or explosive limits**Flammability limit – lower (%)** Not Applicable**Flammability limit – upper (%)** Not Applicable**Explosive limit - lower (%)** Not Available**Explosive limit - upper (%)** Not Available**Vapor pressure** 27 mm Hg @ 60°C / 140°F (50% solution)

39 mm Hg @ 60°C / 140°F (45% solution)

Vapor density Not available**Relative density** 1.457 g/cm³ @ 15.6°C / 60°F (45% solution)1.516 g/cm³ @ 15.6°C / 60°F (50% solution)**Solubility(ies)****Solubility (water)** Soluble in all proportions.**Solubility (other)** Soluble in ethanol, methanol and glycerol. Insoluble in diethyl ether and ammonia.**Partition coefficient (n-octanol/water)** Not Available**Auto-ignition temperature** Not Applicable**Decomposition temperature** Not Available**Viscosity** 5.25 cSt @ 20°C / 68°F (50% solution)**Other information****Solubility (other)** Soluble in ethanol, methanol and glycerol. Insoluble in diethyl ether and ammonia.**Specific gravity** 1.46 @ 15.6°C / 60°F (45% solution)

1.52 @ 15.6°C / 60°F (50% solution)

10. STABILITY AND REACTIVITY**Reactivity**

Contact with most metals will generate flammable hydrogen gas. Contact with water will generate considerable heat. May be corrosive to metals. May be corrosive to: Aluminum. Bronze. Brass. Zinc.

Chemical stability

Material is stable under normal conditions. Rapidly absorbs moisture and carbon dioxide from the air forming potassium carbonate.

Possibility of hazardous reactions

Reacts vigorously or violently with many organic and inorganic chemicals such as: acids, acrolein, acrylonitrile, chlorinated hydrocarbons (e.g. 1,2 dichloroethylene), chlorine dioxide, maleic anhydride, nitroethane, nitroparaffins, 2-nitrophenol, nitropropane, phosphorus, potassium persulfate, and tetrahydrofuran (containing peroxides). Attacks plastics, such as polyethylene terephthalate, polybutylene terephthalate, thermoset polyesters (bisphenol-A fumarate (50-100%), isophthalic acid and general purpose), polyamide-imide (Torlon), polyurethane (rigid) and thermoset chlorinated polyester; elastomers, such as styrene-butadiene (SBR),

polyacrylate, polyurethane, fluorosilicone, silicone, chlorinated polyethylene and soft rubber; and coatings, such as polyester and vinyls (5-100%) and epoxy (general purpose and chemical resistant epoxy) (50-100%) at room temperature.

Conditions to avoid

Contact with incompatible materials. Avoid high temperatures. Do not use in areas without adequate ventilation

Incompatible materials

Metals. Water, moisture. Acrolein. Acrylonitrile. Chlorinated hydrocarbons. Chlorine dioxide. Maleic anhydride. Nitroethane. Nitroparaffins. Nitropropane. 2-nitrophenol. Phosphorus. Potassium persulfate. Tetrahydrofuran.

Hazardous decomposition products

None known.

In the event of fire the following can be released: Potassium oxides.

11.TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

May cause severe irritation to the nose, throat, and respiratory tract.

Skin contact

Causes severe skin burns. Not expected to be absorbed through the skin.

Eye contact

Causes serious eye damage.

Ingestion

Harmful if swallowed. Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation of mists can cause severe respiratory irritation. Symptoms may include coughing, choking and wheezing.

Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding and eventually death. Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. Corrosive to the eyes and may cause severe damage including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity

Harmful if swallowed.

The below product data is the calculated ATE values for this mixture. Individual ingredient component data appears below the product mixture ATE values.

Product	Species	Test Results
Potassium Hydroxide Solution (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2520 mg/kg
<i>Oral</i>		
LD50	Rat	410 mg/kg
Components		
Species		
Test Results		
Potassium Hydroxide (CAS 1310 58-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 1260 mg/kg
<i>Inhalation</i>		
LC50		No Data in Literature
<i>Oral</i>		
LD50	Rat	205 mg/kg
Water (CAS 7732-18-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	Not available.
<i>Inhalation</i>		
LC50	Rat	Not available.
<i>Oral</i>		
LD50	Rat	> 89840 mg/kg

Skin corrosion/irritation

Hazardous by OSHA criteria.

Skin corrosion/irritation - Category 1. Causes severe skin burns.

Serious eye damage/eye irritation

Hazardous by OSHA criteria. Serious eye damage/eye irritation - Category 1 Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not expected to be a respiratory sensitizer.

Skin sensitizer

This product is not expected to be a skin sensitizer.

Germ cell mutagenicity

Not expected to be mutagenic in humans.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Hazardous by OSHA criteria.

Specific Target Organ Toxicity (STOT), Single Exposure, Category 3. May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Not classified as a specific target organ toxicity -repeated exposure.

Aspiration toxicity

This product is not classified as an aspiration hazard.

Chronic effects

Chronic skin contact with low concentrations may cause dermatitis act.

12.ECOLOGICAL INFORMATION

Ecotoxicity

Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. However, may be neutralized by naturally occurring acidity in the environment. The ingredient ecotoxicity data appearing below is expected to be primarily associated with ph.

Components	Species	Test Results
Potassium Hydroxide (CAS 1310-58-3)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 56 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis) 80 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product. Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential

No accumulation in living organisms is expected due to high solubility and dissociation properties.

Mobility in soil

High water solubility indicates a high mobility in soil.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13.DISPOSAL CONSIDERATIONS

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14.TRANSPORT INFORMATION

DOT

UN number	UN1814
UN proper shipping name	Potassium hydroxide solution
Transport hazard class(es)	
Class	8
Subsidiary risk	None
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. US CERCLA Reportable Quantity (RQ): 1000 lbs / 454 kg
Special provisions	B2; IB2; N34; T7; TP2
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1814
UN proper shipping name	Potassium hydroxide solution
Transport hazard class(es)	
Class	8
Subsidiary risk	None
Packing group	II
Environmental hazards	No
ERG Code	8L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed
Cargo aircraft only	Allowed

IMDG

UN number	UN1814
UN proper shipping name	Potassium hydroxide solution
Transport hazard class(es)	
Class	8
Subsidiary risk	None
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Read safety instructions, SDS and emergency procedures before

**Annex II of MARPOL 73/78 and
the IBC Code
DOT**

handling.
Not available.



IATA; IMDG



15. REGULATORY INFORMATION

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Potassium hydroxide (CAS 1310-58-3) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Potassium hydroxide (CAS 1310-58-3)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK – Hazardous Substances

Potassium hydroxide (CAS 1310-58-3)

US. Rhode Island RTK

Potassium hydroxide (CAS 1310-58-3)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	YES
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST VERSION

Issue date	03-06-2015
Version #	0
Revision Indicator	New safety data sheet.
List of abbreviations	ACGIH: American Conference of Governmental Industrial Hygienists CAS: Chemical Abstract Services CERCLA: Comprehensive Environmental Response, Compensation and Liability Act of 1980 CFR: Code of Federal Regulations DOT: Department of Transportation DSL: Domestic Substance List

EINECS: European Inventory of Existing Commercial chemical
Substances EPA: Environmental Protection Agency
EPCRA: Emergency Planning and Community Right-to-Know Act
HSDB® - Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC: Intermediate Bulk Container
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods LC: Lethal
Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organization for Economic Cooperation and Development
OSHA: Occupational Safety and Health Administration
PPE: Personal Protective Equipment
RCRA: Registry of Toxic Effects of Chemical Substances
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TLV: Threshold Limit Values
TWA: Time Weighted Average

References

ACGIH Documentation of the Threshold Limit Values and Biological
Exposure Indices (2014) Canadian Centre for Occupational Health and
Safety, CCIInfoWeb Databases, 2014 (Chempendium, RTECs, HSDB,
INCHEM)
Material Safety Data Sheet from manufacturer.
OECD - The Global Portal to Information on Chemical Substances -
eChemPortal, 2014.

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