

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION of the SUBSTANCE or PREPARATION

**Trade/Material Name:** EZ SPA UP  
**Chemical Names, Common Names:** Alkali Metal Salt  
**Synonyms:** Proprietary  
**Product Use/Uses Advised Against:** Adjustment of Spa Water pH  
**Molecular Formula:** Proprietary  
**COMPANY/UNDERTAKING IDENTIFICATION:**  
**U.S. Distributor's Name:** Api  
**Address:** 880 Jupiter Park Dr., Suite 14  
Jupiter, FL 33458  
1-(561)-743-0449  
**Business Phone:**  
**Emergency Phone:** CHEMTEL: 1-800-255-3924 (U.S./Canada/Puerto Rico) [24-hours]  
CHEMTEL: +1-813-248-0585 (Outside North America) [24-hours-collect]

### EMAIL ADDRESS FOR PRODUCT INFORMATION:

ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. The product is also classified per all applicable EU Directives through EC 1907: 2006, the European Union CLP EC 1272/2008 and the Global Harmonization Standard.

## 2. HAZARD IDENTIFICATION

**GLOBAL HARMONIZATION AND EU CLP REGULATION (EC) 1272/2008 LABELING AND CLASSIFICATION:** Classified in accordance with CLP Regulation (EC) 1272/2008. For additional information on classification under (67/548/EEC), see below.

**Classification:** Not Applicable      **Hazard Statements:** Not Applicable

See Section 16 for full text of Precautionary Statements and Hazard Symbols, if applicable.

**EU LABELING AND CLASSIFICATION 67/548/EEC:** This product has been classified as per European Community Council Directive 67/548/EEC or subsequent Directives.

**Classification:** Not Applicable      **Risk Phrases:** Not Applicable      **Safety Phrases:** Not Applicable

See Section 16 for full text of Ingredient Risk and Safety Phrases, if applicable.

**EMERGENCY OVERVIEW:** Caution! Strong reducing agent. **Product Description:** This product is a white to crystalline, odorless solid. **Health Hazards:** This product may cause mild eye or skin irritation if contact is prolonged. Inhalation may be irritating. Ingestion of large quantity will cause indigestion and may cause formation of carbon dioxide. **Flammability Hazards:** Not flammable. Corrosive fumes of sodium oxide, carbon monoxide and carbon dioxide are formed in a fire. **Reactivity Hazards:** Starts decomposing when heated over 50°C (122°F), releasing carbon dioxide, sodium carbonate and water. Closed containers can develop pressure if the contents come into contact with water. **Environmental Hazards:** Although this product presents minimal environmental hazard, all intentional and accidental release should be avoided. **Emergency Considerations:** Emergency responders should wear appropriate protection for situation to which they respond.

## 3. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	EINECS#	WT%	EU Hazard Symbol (67/548/EEC)	GHS/EU Hazard Symbol (1272/2008 EC)	EU Classification (67/548/EEC) GHS & EU Classification (1272/2008 EC) Risk Phrases/Hazard Codes
Proprietary Alkali Metal Salt			100%	Not Applicable	Not Applicable	EU 67/548 Hazard Classification: Not Applicable GHS & EU 1272/2008 Classification: Not Applicable

See Section 15 for full text of Ingredient Risk Phrases and Precautionary Statements, if applicable.

## 4. FIRST-AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES:** Take a copy of label and MSDS to physician or health professional with the contaminated individual.

**IMMEDIATE MEDICAL ATTENTION NEEDED:** No.

**INHALATION:** If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If dusts from of this product are inhaled, remove victim to fresh air. Seek medical attention if adverse effect occurs after removal to fresh air.

**SKIN EXPOSURE:** If skin contact cause irritation, flush with running water. Seek medical attention if adverse effects occur after flushing.

**EYE EXPOSURE:** If dusts or particulates from the product enter the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 20 minutes. Do not interrupt flushing. Seek medical attention adverse effect occurs after flushing.

**INGESTION EXPOSURE:** If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Rinse mouth with water immediately. Victim should drink large quantities of water. If milk is available, victim should drink it after drinking water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

## 4. FIRST-AID MEASURES (Continued)

**PROTECTION OF FIRST AID RESPONDERS:** See Sections 6 (Accidental Release Measures) and 8 (Exposure Controls-Personal Protection).

**MOST IMPORTANT SYMPTOMS/EFFECTS OF EXPOSURE BOTH ACUTE AND DELAYED:** See Section 11 (Toxicological Information).

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Pre-existing respiratory disorders may be aggravated by over-exposure to this product.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED:** Treat symptoms and eliminate overexposure.

## 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** Not applicable.

**AUTOIGNITION TEMPERATURE:** Not applicable.

**FLAMMABLE LIMITS (in air by volume, %):** Not applicable.

**FIRE EXTINGUISHING MEDIA:** Use fire extinguishing materials appropriate for surrounding materials.

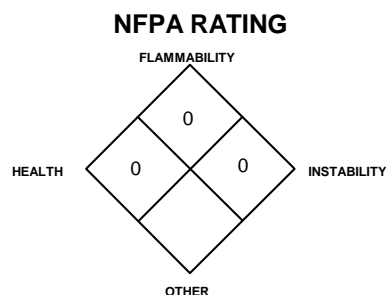
**UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

**SPECIAL FIRE AND EXPLOSION HAZARDS:** Corrosive fumes of sodium oxide, carbon monoxide and carbon dioxide are formed in a fire. This material starts decomposing when heated over 50°C (122°F), releasing carbon dioxide, sodium carbonate and water, with total decomposition at 270°C (518°F). If extremely large quantities are involved in a fire, significant levels of carbon dioxide may be generated by heat. Closed containers may rupture violently when heated.

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion Sensitivity to Static Discharge: Not sensitive.

**ADVICE TO FIRE-FIGHTERS:** Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel.



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Proper protective equipment should be used. In the event of a spill, clear the area and protect people. The atmosphere must have levels of components lower than those listed in Section 8, (Exposure Controls and Personal Protective Equipment) if applicable, and have at least 19.5 percent oxygen before personnel can be allowed into the area without Self-Contained Breathing Apparatus (SCBA). Call CHEMTREC (1-800-424-9300) for emergency assistance. Or if in Canada, call CANUTEC (613-996-6666).

### PROTECTIVE EQUIPMENT:

Small Spills: Wear rubber gloves, splash goggles, and appropriate body protection.

Large Spills: Minimum Personal Protective Equipment should be rubber gloves, rubber boots, face shield, and Tyvek suit. Minimum level of personal protective equipment for releases in which the level of oxygen is less than 19.5% or is unknown must be **Level B: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard hat, and Self-Contained Breathing Apparatus.**

### METHODS FOR CLEAN-UP AND CONTAINMENT:

Small Spills: Sweep-up or vacuum-up spilled solid. Place in appropriate container for disposal. Clean spill area with thoroughly with water and absorb any residual material and moisture with polypropylene pads or other appropriate material.

Large Spills: Trained personnel following pre-planned procedures should handle non-incident releases. Dry sweeping is not recommended. Pre-damping the material or use of a vacuum is preferred. Minimize the generation of airborne dusts. Shovel into clean, dry, labeled containers and cover.

All Spills: Place all spill residue in an appropriate container and dispose of properly. Decontaminate the area thoroughly. After all spill residue has been removed from the area, rinse the area with flooding quantities of water. If necessary, discard all stained response equipment or rinse with soapy water before returning such equipment to service.

**ENVIRONMENTAL PRECAUTIONS:** Prevent material from entering sewer or confined spaces, waterways, soil or public waters. Do not flush to sewer. For spills on water, contain, minimize dispersion and collect.

**REFERENCE TO OTHER SECTIONS:** See Section 13, Disposal Considerations for more information.

## 7. HANDLING and USE

**PRECAUTIONS FOR SAFE HANDLING:** All employees who handle this material should be trained to handle it safely. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Use in a well-ventilated location

## 7. HANDLING and USE (Continued)

**CONDITIONS FOR SAFE STORAGE:** Store in sealed containers. Store this product in a cool, dry location, away from sources of intense heat. Store away from incompatible materials (see Section 10, Stability and Reactivity) and moisture. If during the use of this product, dusts or particulates are generated, avoid breathing, or skin or eye contact. Use in a well-ventilated location, segregated from other materials and operations. Contact with water can result in generation of carbon dioxide and may cause closed containers to burst. Open containers slowly on a stable surface. Containers of this product must be properly labeled. Areas in which this product is used should be wiped down, so that this product does not accumulate.

**SPECIFIC END USE(S):** This product is used as a pH adjustment for spa water. Follow all industry standards for use of this product.

**PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:** When cleaning non-disposable equipment, wear latex or butyl rubber (double gloving is recommended), goggles, and lab coat. Wash equipment with soap and water. Wipe equipment down with damp sponge or polypad. Collect all rinsates and dispose of according to applicable Federal, State, and local procedures standards.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below, if applicable. Ensure eyewash/safety shower stations are available near areas where this product is used.

**EXPOSURE LIMITS/CONTROL PARAMETERS:**

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR							
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELS		NIOSH	OTHER
		TWA mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>	TWA mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>	TWA mg/m <sup>3</sup>	STEL mg/m <sup>3</sup>	IDLH mg/m <sup>3</sup>	mg/m <sup>3</sup>
Proprietary Alkali Metal Salt		NE	NE	NE	NE	NE	NE	NE	NE
No exposure limits are in place for this material. It is recommended that exposure limits for Particulates Not Otherwise Classified/Regulated be followed.		NE	NE	15 or 50 (total dust), 5 or 15 mppcf (respirable fraction)	NE	NE	NE	NE	NE

NE = Not Established.

mppcf = Millions of Particles per Cubic Foot

**INTERNATIONAL EXPOSURE LIMITS:** Currently, the following international exposure limits are in place for Proprietary Alkali Metal Salt. This may not be a complete list and exposure limits change and should be checked for currency.

Russia: STEL = 5 mg/m<sup>3</sup>, JUN 2003

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), equivalent standards of Canada (including CSA Standard Z94.4-02 and CSA Standard Z94.3-07), or standards of EU member states (including EN 529:2005 for respiratory PPE, CEN/TR 15419:2006 for hand protection, and CR 13464:1999 for face/eye protection. Please reference applicable regulations and standards for relevant details.*

**RESPIRATORY PROTECTION:** If dusts or particulates from this product are created during use, use appropriate respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) and equivalent U.S. State standards, Canadian CSA Standard Z94.4-93 and the European Standard EN 529:2005 and Respiratory Protection Standards of EU member states. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998).

**EYE PROTECTION:** Wear safety glasses if particulates are present. Splash goggles and faceshield should be considered when handling solutions made from this product. If necessary, refer to U.S. OSHA 29 CFR 1910.133, the Canadian CSA Standard Z94.3-M1982, *Industrial Eye and Face Protectors*, or the European Standard CR 13464:1999 for further information.

**HAND PROTECTION:** Wear nitrile rubber gloves or solvex gloves for routine industrial use. Use triple gloves for spill response. If necessary, refer to U.S. OSHA 29 CFR 1910.138, appropriate Standards of Canada, or the European Standard CEN/TR 15419:2006.

**BODY/SKIN PROTECTION:** Use body protection appropriate for task. If necessary, refer to OSHA Technical Manual (Section VII: Personal Protective Equipment), or refer to appropriate Standards of Canada, or the European Standard CEN/TR 15419:2006, for further information. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136 and the Canadian CSA Standard Z195-M1984, *Protective Footwear*.

**OTHER PROTECTIVE MEASURES:** Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors). Decontaminate all protective equipment following use.

## 9. PHYSICAL and CHEMICAL PROPERTIES

**FORM:** Powdered or crystalline solid.

**MOLECULAR WEIGHT:** 84.01

**VAPOR DENSITY (air= 1):** Not applicable.

**SATURATION VAPOR CONCENTRATION:** Not available.

**BOILING POINT:** Decomposes.

**SOLUBILITY IN WATER @ 20°C:** 9.6 g/100 mL

**OTHER SOLUBILITIES:** Insoluble in ethanol.

**OXIDIZING PROPERTIES:** Not an oxidizer.

**EXPLOSIVE PROPERTIES:** Not explosive.

solution. The alkalinity increases as solution stands, is agitated or heated.

**COEFFICIENT WATER/OIL DISTRIBUTION:** Not applicable (compound is inorganic and dissociates)

**DECOMPOSITION TEMPERATURE:** Begins to decompose at 50°C (122°F) with complete decomposition at 270°C (578°F).

**APPEARANCE, ODOR and COLOR:** This product is white crystalline to powdered, odorless solid.

**HOW TO DETECT THIS SUBSTANCE (identification properties):** The appearance of this product may be an identifying property in event of accidental release.

**ODOR:** Odorless.

**MOLECULAR FORMULA:** CH<sub>2</sub>O<sub>3</sub>•Na

**VISCOSITY:** Not applicable.

**VAPOR PRESSURE (air = 1):** Negligible.

**FREEZING/MELTING POINT:** Decomposes.

**SPECIFIC GRAVITY/DENSITY @ 20°C:** 2.16

**EVAPORATION RATE (water = 1):** Not applicable.

**ODOR THRESHOLD:** Not applicable.

**pH @ 20°C:** 8.3-8.4 (freshly prepared 0.1 M (8.4%)

## 10. STABILITY and REACTIVITY

**REACTIVITY:** Not applicable.

**CHEMICAL STABILITY:** Normally stable in dry air at room temperature. In moist air, it slowly decomposes and loses carbon dioxide. Starts decomposing when heated over 50°C (122°F), releasing carbon dioxide, sodium carbonate and water.

**DECOMPOSITION PRODUCTS:** *Combustion:* If involved in a fire, sodium oxide, carbon monoxide and carbon dioxide may be generated. *Hydrolysis:* Carbon dioxide.

**MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:** This product is incompatible with acids, monoammonium phosphate, sodium-potassium alloy, 2-furaldehyde. Solutions and/or solid attacks aluminum alloys 5052 (10% solution) and cast B-356, carbon steel alloys 1075 and 1095 and zinc plated steel at room temperature. Solid and 10% solution are corrosive to aluminum alloy 3003 and carbon steel alloys 1010 and 1020 (10% solution) at 93°C (200°F).

**POSSIBILITY OF HAZARDOUS REACTIONS OR POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Avoid extreme temperatures, exposure to moisture and incompatible chemicals.

## 11. TOXICOLOGICAL INFORMATION

**SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE:** The health hazard information provided below is pertinent to employees using this product in an occupational setting. The following paragraphs describe the symptoms of exposure by route of exposure.

**INHALATION:** Inhalation of dusts or particulates from this product may cause mild irritation of the respiratory system.

**CONTACT WITH SKIN or EYES:** Eye contact may cause mechanical irritation. Prolonged or repeated contact with dusts or dilute solutions may result in redness, swelling, and thickening of the skin (dermatitis).

**SKIN ABSORPTION:** This product is not expected to pose a hazard by skin absorption.

**INGESTION:** Ingestion is not anticipated to be a likely route of occupational overexposure for this product. Ingestion of large quantity may cause excessive carbon dioxide production in the digestive tract and metabolic alkalosis, dizziness, diarrhea, vomiting and abdominal pains.

**INJECTION:** Injection is a not likely route of exposure for this product.

**HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms.** Overexposure to this product may cause the following health effects:

**ACUTE:** Eye contact and skin contact and inhalation may cause mild irritation.

**CHRONIC:** Chronic skin exposure may result in dermatitis.

**TARGET ORGANS:** ACUTE: Respiratory system, skin, eyes.

CHRONIC: Skin.

### HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD	(BLUE)	1
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FLAMMABILITY HAZARD	(RED)	0
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PHYSICAL HAZARD	(YELLOW)	0
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### PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY
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SEE SECTION 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe \* = Chronic hazard

## 11. TOXICOLOGICAL INFORMATION (Continued)

**TOXICITY DATA:** Currently, the following toxicity data are available this material.

Standard Draize Test (Skin-Human) 30 mg/3 days-intermittent: Mild

Standard Draize Test (Eye-Rabbit) 100 mg/30 seconds: Mild

TDLo (Oral-Man) 20 mg/kg/5 days-intermittent: Gastrointestinal: nausea or vomiting; Nutritional and Gross Metabolic: changes in potassium, metabolic acidosis

TDLo (Oral-Infant) 1260 mg/kg: Lungs, Thorax, or Respiration: other changes; Kidney/Ureter/Bladder: urine volume increased; Nutritional and Gross Metabolic: changes in sodium

LD<sub>50</sub> (Oral-Rat) 4220 mg/kg

LD<sub>50</sub> (Oral-Mouse) 3360 mg/kg

LC (Inhalation-Rat) > 900 mg/m<sup>3</sup>

TCLo (Inhalation-Rat) 77,200 µg/kg/17 weeks: Cardiac: other changes Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Nutritional and Gross Metabolic: changes in sodium

TDLo (Oral-Bird-Domestic) 17,500 mg/kg/35 days-continuous: Blood: changes in erythrocyte (RBC) count; Nutritional and Gross Metabolic: changes in chlorine; Nutritional and Gross Metabolic: changes in potassium

TDLo (Oral-Bird-Domestic) 65,625 mg/kg/35 days-continuous: Kidney/Ureter/Bladder: other changes; Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Related to Chronic Data: death

TDLo (Oral-Bird-Domestic) 175,000 mg/kg/35 days-continuous: Cardiac: cardiomyopathy including infarction, other changes; Lungs, Thorax, or Respiration: other changes

TDLo (Oral-Bird-Domestic) 175,000 mg/kg/35 days-continuous: Liver: other changes; Kidney/Ureter/Bladder: changes in blood vessels or in circulation of kidney, changes in both tubules and glomeruli

TDLo (Oral-Bird-Domestic) 175,000 mg/kg/35 days-continuous: Behavioral: somnolence (general depressed activity), food intake (animal), fluid intake

TDLo (Oral-Bird-Domestic) 175,000 mg/kg/35 days-continuous: Musculoskeletal: joints, other changes; Biochemical: Metabolism (Intermediary): effect on inflammation or mediation of inflammation

TDLo (Oral-Bird-Domestic) 350,000 mg/kg/35 days-continuous: Kidney/Ureter/Bladder: structural or functional changes in ureter, changes in kidney weight; Blood: changes in spleen

TDLo (Oral-Bird-Domestic) 350,000 mg/kg/35 days-continuous: Gastrointestinal: other changes

TDLo (Intraperitoneal-Mouse) 40 mg/kg: female 7 day(s) after conception: Reproductive: Specific Developmental Abnormalities: other developmental abnormalities

Unscheduled DNA Synthesis (Oral-Rat) 50,400 mg/kg/4 weeks-continuous

**CARCINOGENIC POTENTIAL OF COMPONENTS:** This material is not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, and ACGIH, and therefore are not considered to be, nor suspected to be cancer-causing agents by these agencies.

**IRRITANCY OF PRODUCT:** This product may cause mild irritation to the respiratory system and eyes.

**SENSITIZATION TO THE PRODUCT:** This material is not a known human skin or respiratory sensitizer.

**SYNERGISTIC MATERIALS:** None known.

**REPRODUCTIVE TOXICITY INFORMATION:** Listed below is information concerning the effects of this material on human and animal reproductive systems.

Mutagenicity: The components of this product are not reported to cause human mutagenic effects.

Embryotoxicity: The components of this product are not reported to cause human embryotoxic effects.

Teratogenicity: The components of this product are not reported to cause human teratogenic effects.

Reproductive Toxicity: The components of this product are not reported to cause human reproductive effects.

*A **mutagen** is a chemical that causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines. An **embryo toxin** is a chemical that causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A **teratogen** is a chemical that causes damage to a developing fetus, but the damage does not propagate across generational lines. A **reproductive toxin** is any substance that interferes in any way with the reproductive process.*

**ACGIH BIOLOGICAL EXPOSURE INDICES (BEIs):** Currently, ACGIH Biological Exposure Indices (BEIs) have not been determined for the components of this product.

## 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**MOBILITY:** In aqueous solutions this material is expected to be mobile.

**PERSISTENCE AND BIODEGRADABILITY:** As an inorganic solid this material will not biodegrade. Persistence is not significant as the material will decompose to form carbon dioxide.

**BIO-ACCUMULATION POTENTIAL:** This product has no bio-accumulation potential.

**ECOTOXICITY:** The following aquatic toxicity is available.

LC<sub>50</sub> (*Gambusia affinis* Western mosquitofish) 24 hours = 7700 mg/L; static  
LC<sub>50</sub> (*Gambusia affinis* Western mosquitofish) 48-96 hours = 7550 mg/L; static  
LC<sub>50</sub> (*Lepomis macrochirus* Bluegill) 96 hours = 8600 mg/L; static  
LC<sub>50</sub> (*Nitzschia linearis* Diatom) 5 days = 650 mg/L; static

LC<sub>50</sub> (*Oncorhynchus mykiss* Rainbow trout) 96 hours = 7700 mg/L; flow through  
LC<sub>50</sub> (*Lepomis macrochirus* Bluegill sunfish) 96 hours = 7100 mg/L; flow through  
LC<sub>50</sub> (*Daphnia magna* Water flea) 48 hours = 1640 mg/L (confidence limit: 1170-2030 mg/L); static  
LC<sub>50</sub> (*Ceriodaphnia dubia*) 48 hours = 1,020 mg/L (95% confidence limit: 880-1,170 mg/L); static

**RESULTS OF PBT AND vPvB ASSESSMENT:** Not information available.

**OTHER ADVERSE EFFECTS:** This material is not listed or expected to have having ozone depletion potential.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

## 13. DISPOSAL CONSIDERATIONS

**WASTE/DISPOSAL METHODS:** It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL CONTAINERS:** Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. Permeable cardboard containers are not appropriate and should not be used. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

**PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING:** Wear proper protective equipment when handling waste materials. Dispose of in accordance with applicable Federal, State, and local procedures and standards.

**EPA WASTE NUMBER:** Not applicable.

**EUROPEAN WASTE CODES:** Not applicable.

### 14. TRANSPORTATION INFORMATION

**TRANSPORT IN BULK ACCORDING TO Annex II of MARPOL73/78 and the IBC CODE:** Not applicable.

**U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS:** This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

**TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:** This product is not classified as Dangerous Goods, per regulations of Transport Canada.

**INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA):** This product is not classified as dangerous goods, per the International Air Transport Association.

**INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO):** This product is not classified as dangerous goods, per the International Maritime Organization.

**EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):** This product is not classified by the Economic Commission for Europe to be dangerous goods.

### 15. REGULATORY INFORMATION

**ADDITIONAL UNITED STATES REGULATIONS:**

**U.S. SARA REPORTING REQUIREMENTS:** This material is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

**U.S. SARA SECTION 302 THRESHOLD PLANNING QUANTITY (TPQ):** None.

**U.S. SARA SECTION 304 REPORTABLE QUANTITY (TPQ):** None

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** None.

**U.S. TSCA INVENTORY STATUS:** This compound is listed on the TSCA Inventory.

**OTHER U.S. FEDERAL REGULATIONS:** Not applicable.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** This material is not listed on the California Proposition 65 lists.

**ADDITIONAL CANADIAN REGULATIONS:**

**CANADIAN DSL/NDL STATUS:** The components of this product are listed on the DSL inventory.

**CANADIAN ENVIRONMENTAL PROTECTION AGENCY (CEPA) PRIORITIES SUBSTANCES LIST:** Not applicable.

**CANADIAN WHMIS CLASSIFICATION and SYMBOLS:** Not applicable.

**GLOBAL HARMONIZATION AND EU CLP REGULATION (EC) 1272/2008 LABELING AND CLASSIFICATION:** Classified in accordance with CLP Regulation (EC) 1272/2008.

Classification: Not applicable. Signal Word: Not applicable. Hazard Statements: Not applicable.

Precautionary Statements: Not applicable. Hazard Symbols: Not applicable.

**ADDITIONAL EUROPEAN REGULATIONS:**

**EU LABELING AND CLASSIFICATION:** The product has been classified as per European Community Council Directives, as follows.

Classification: Not applicable. Risk Phrases: Not applicable. Safety Phrases: Not applicable. Hazard Symbol: Not applicable.

### 16. OTHER INFORMATION

**U.S. ANSI STANDARD LABELING (Precautionary Statements):** **CAUTION!** MAY CAUSE RESPIRATORY IRRITATION IF INHALED. MAY CAUSE MECHANICAL EYE IRRITATION. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DERMATITIS. INGESTION OF LARGE QUANTITY MAY PRODUCE LARGE QUANTITY OF CARBON DIOXIDE. CONTACT WITH WATER OR HEATING ABOVE 50°C (122°F) PRODUCES CARBON DIOXIDE; CLOSED CONTAINERS MAY RUPTURE. Avoid breathing dusts or particulates. Avoid contact with skin, eyes, or clothing. Wash after handling. Do not taste or swallow. Wear gloves, goggles, and appropriate body protection. **FIRST-AID:** In case of contact with skin or eyes, flush skin with plenty of water. If inhaled, remove to fresh air. If swallowed, induce vomiting. Get medical attention if adverse effects develop. **IN CASE OF FIRE:** Use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam. **IN CASE OF SPILL:** Sweep-up or vacuum spilled solid. Consult Material Safety Data Sheet for additional information.

**PREPARED BY:** CHEMICAL SAFETY ASSOCIATES, Inc.

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