



Effective Date: May 10, 2016

Product #(s) –61902

## Safety Data Sheet

For Emergency Call:  
CHEM-TEL (800) 255-3924 24 Hour Assistance

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** PolyGuard Ultra Shock Pool Treatment

**CAS Number:** 7681-52-9 / 1310-73-2

**Recommended Uses:** Pool Treatment

**Company Identification**

Manufacturer's Name: ZECOL PRODUCTS COMPANY

Address: 4635 Willow Drive, Medina, MN 55340

Telephone – General Information: (763) 478-3438

### 2. HAZARDS IDENTIFICATION

**Hazard Classes:** Oxidizing Liquid Category 1  
Corrosive to Metals Category 1  
Skin Corrosion/Irritation Category 1B  
Eye Damage/Irritation Category 1  
Acute (short-term) Aquatic Hazard Category 1

**Signal Word:** Danger

**Hazard Statements:**

H271 May cause fire or explosion; strong oxidizer.  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H400 Very toxic to aquatic life.

**Precautionary Statements:**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children,  
P103 Read label before use.  
P210 Keep away from heat.  
P220 Keep/Store away from clothing and other combustible materials.  
P221 Take any precaution to avoid mixing with combustibles and incompatible materials (see Section 10)  
P234 Keep only in original container.  
P260 Do not breathe dusts or mists.  
P264 Wash thoroughly after handling.  
P270 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P283 Wear fire/flame resistant/retardant clothing.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P310 Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P371 + P380 + 375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P370 + P378 In case of fire: Use dry chemical, CO<sub>2</sub>, and water spray for extinction.

P390 Absorb spillage to prevent material damage.

P391 Collect spillage.

P406 Store in corrosive resistant container with a resistant inner liner,

P501 Dispose of contents/container to a specialized waste disposal plant in accordance with local/regional regulations.

#### Hazard Pictograms:



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	Typical Weight Percentage	CAS Number
Sodium Hypochlorite	12.5 - 15.6%	7681-52-9
Sodium Hydroxide	0.2 – 2.0%	1310-18-5
Water	82.4 – 87.3%%	7732-18-5

### 4. FIRST AID

**Eyes:** Immediately move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek immediate medical attention. For direct contact, remove contact lenses if present and easy to do so. Immediately hold eyelids apart and flush the affected eye(s) with clean water for at least 30 minutes. Seek immediate medical attention.

**Skin:** Immediately flush affected area(s) with large amounts of water while removing contaminated shoes, clothing and constrictive jewelry. If skin surface is damaged, apply a clean dressing and seek immediate medical attention. If skin surface is not damaged, cleanse the affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek immediate medical attention.

**Inhalation:** Immediately move victim away from source of exposure and into fresh air. If respiratory symptoms or other symptoms of exposure develop, seek immediate medical attention. If breathing



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difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion:** \*\*\*Do NOT induce vomiting. Corrosive Material. Alkaline burns.\*\*\* If victim has any breathing difficulties, call for emergency help immediately. If victim is conscious and alert, immediately rinse mouth with water and dilute the ingested material by giving one glass of milk or water to drink; ½ glass to children under 5. Never give anything by mouth to an unconscious person. Call a physician or POISON CENTER. If possible, do not leave victim unattended.

**Note to Physician:** This material is corrosive and may cause alkaline burns including gastroesophageal, gastric or pyloric structures and stenosis. Severe (3<sup>rd</sup> degree) alkaline burns to the esophagus have been associated with an increased risk of esophageal cancer.

**Medical Conditions:** Conditions which may be aggravated by exposure include skin and respiratory disorders.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical, CO<sub>2</sub>, or water spray. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Specific Hazards:** Oxidizer. This material is an oxidizer and may increase the flammability of any combustible substance. It is the nature of oxidizers to provide their own oxygen source, smothering fire may be ineffective. Contact with common metals can generate hydrogen, which can form flammable mixtures with air. If container is not properly cooled, it can explode in the heat of a fire.

**Hazardous Combustion Products:** May decompose upon heating to produce corrosive and/or toxic fumes.

**Special Firefighting Procedures:** For fires beyond the initial stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area and keep unauthorized personnel out. Cool equipment exposed to fire with water, if it can be done with minimal risk. Clean-up under expert supervision is advised.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Strong oxidizer. Keep unauthorized personnel out. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is recommended. Isolate hazardous area and keep unauthorized personnel out. Clean-up under expert supervision is advised. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Environmental Precautions:** Stop spill/release if it can be done with minimal risk. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways.



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**Methods for Containment and Clean-Up:** Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand, earth or other non-combustible material, and place in suitable container for disposal. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Keep away from ignition sources such as heat/sparks/open flames – No smoking. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see Section 8). The use of explosion-proof equipment is recommended and may be required (see appropriate fire codes). Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practice.

**Conditions for Safe Storage:** Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Post area “No Smoking or Open Flame.” Store only in approved containers. Keep away from any incompatible materials such as ordinary combustibles, flammable liquids, and those materials including other oxidizers, which could react with the oxidizer or catalyze its decomposition (see Section 10). Prohibit accumulation of combustible waste in storage areas.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Component	ACGIH TLV	ACGIH CEIL	OSHA PEL	OSHA STEL
Sodium Hypochlorite	---	---	---	---
Sodium Hydroxide	---	2 mg/m <sup>3</sup>	2mg/m <sup>3</sup>	---

**Engineering Controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional ventilation or exhaust systems may be required.

### Specific Personal Protective Equipment

**Eye/Face Protection:** Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances. The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation or injury

**Skin:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls or encapsulated suits. Suggested protective materials: Neoprene, rubber.

**Respiratory Protection:** Wear a positive pressure air supplied respirator with a chlorine cartridge in situations where there may be potential for exceeding airborne exposure limits (see exposure guidelines).



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A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse. It is recommended that impervious clothing be worn when skin contact is possible.

**Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.**

## 9. PHYSICAL AND CHEMICAL PROPERTIES (approximate values based on propylene glycol)

**Appearance:** Yellow-green liquid

**Odor:** Chlorine

**Odor threshold:** No data

**pH:** 12.5 to 13.5

**Melting/Freezing Point:** -11°C / 12°F

**Boiling point (at 1 atm):** 104°C / 219 °F

**Flash Point:** Non-flammable

**Auto-Ignition Temperature:** Non-flammable

**Evaporation rate (butyl acetate = 1):** No data

**Flammability (solid, gas):** Not applicable

**Explosive Limits:** Non-flammable

**Vapor Pressure:** Variable

**Vapor Density (air = 1):** No data

**Specific gravity (H<sub>2</sub>O = 1):** >1.224 @ 20°C / 68°F

**Solubility in water:** Soluble

**Partition Coefficient:** No data

**Decomposition Temperature:** No data

**Viscosity:** 2.15 @ 23 °C

## 10. STABILITY AND REACTIVITY

**Stability (thermal, light, etc.):** Stable under normal conditions of storage and handling, however, stability decreases with concentration, light heat, fire, decrease in pH, metallic impurities such as nickel, cobalt, copper and iron. Naturally decomposes with age.

**Conditions to Avoid:** Avoid high heat, sunlight and ultra-violet light

**Incompatibility (materials to avoid):** Avoid contact with oxidizing and reducing agents, acids, alcohols, ammonia, chlorinated isocyanurates, combustibles, cyanide, detergents, ethers, hydrocarbons, and metals.

**Hazardous Decomposition Products:** Contact with acid releases chlorine gas, Natural decomposition product is oxygen. Thermal decomposition or burning may produce hydrochloric acid.



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Contact with ammonia may release hazardous gases. Other decomposition products are hypochlorous acid, sodium chlorate, sodium chloride.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity:

Product/Ingredient Name	Result	Species	Dose
Sodium Hypochlorite	LD50 Oral	Rat	8.91 g/kg
	LD50 Dermal	Rabbit	> 20g/kg

**Skin Corrosion/Irritation:** Corrosive. Contact may cause severe irritation, skin burns and permanent skin damage.

**Serious Eye Damage/Irritation:** Corrosive. Contact may cause severe irritation, eye burns and permanent eye damage

**Signs and Symptoms:** Can causes severe irritation of nose, throat and digestive tract, nausea, vomiting, abdominal pain, breathing difficulties, hypotension, pneumonitis and pulmonary edema

**Skin Sensitization:** None reported

**Respiratory Sensitization:** No data found.

**Germ Cell Mutagenicity:** There is insufficient information available to conclude that this material is mutagenic

**Carcinogenicity:** There is insufficient information available to conclude that this material is carcinogenic. It is not listed by NTP, IARC or OSHA.

**Reproductive Toxicity:** No data found.

**Specific Target Organ Toxicity (Single Exposure):** None reported.

**Specific Target Organ Toxicity (Repeated Exposure):** There is insufficient information available to conclude that this material causes target organ toxicity.

## 12. ECOLOGICAL INFORMATION

**Toxicity:** This material is acutely toxic to aquatic animals.

Ingredient Name	Result	Species	Exposure
Sodium Hypochlorite	Acute LC50 >0.023 to <0.052mg/L Fresh Water	Fish	96 hr
	Acute LC50 = 141ug/L Fresh Water	Daphnia	48 hr

**Persistence and Degradability:** Material is degradable. No other data

**Bioaccumulative Potential:** No data found.



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**Mobility in Soil:** No data found

**Other Adverse Effects:** None known

### 13. DISPOSAL CONSIDERATIONS

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

Recycle wherever possible. Large volumes may be suitable for re-distillation or, if contaminated, incinerated. Can be disposed of in a sewage treatment facility.

This material, if discarded as produced would meet the criteria of a characteristic hazardous waste as defined by 40CFR 261 and would have the characteristic of corrosivity (D002). Use which results in chemical or physical change of this material could subject it to additional regulation as a hazardous waste.

### 14. TRANSPORT INFORMATION

**DOT/TDG Proper Shipping Name:** Hypochlorite Solutions

**DOT/TDG Identification Number:** UN1791

**DOT Hazard Class:** 8 / **TDG Hazard Class:** 8

**DOT/TDG Packing Group:** III

**ERG Guide Number:** 154

**Marine Pollutant:** No

### 15. REGULATORY INFORMATION

**TSCA:** Components are listed on the TSCA inventory.

**DSL:** Components are listed on the DSL inventory.

**OSHA (Occupational Safety and Health Administration):** This material is considered to be hazardous as defined by the OSHA Hazard Communication Standard.

This material has not been identified as a carcinogen by NTP, IARC or OSHA

**CERCLA/SARA – Section 302 Extremely Hazardous Substances and TPQ (in pounds):** This material does NOT contain chemicals subject to the reporting requirements of SARA 302 and 40 CFR 355 Appendix A and B.

**EPA (CERCLA) Reportable Quantity (in pounds):** This material contains the following chemicals subject to the reporting requirements of 40 CFR 302.4:

Component	Concentration	RQ
Sodium Hypochlorite	12.5-15.6%	100
Sodium Hydroxide	0.2-2.0%	1000

**CERCLA/SARA - Sections 311/312 (Title III Hazard Categories):**

Acute: Yes Chronic: No Fire: Yes Reactivity: Yes



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**CERCLA/SARA – Section 313 and 40 CFR 372:** This material does NOT contain chemicals subject to the reporting requirements of SARA 313 and SARA Title III and 40 CFR:

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** This material does NOT contain detectable chemicals known to the State of California to cause cancer and/or reproductive toxicity.

**Canada:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the Regulations.

WHMIS Hazard Class: C (oxidizer), E (corrosive)

**16. OTHER INFORMATION**

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Previous Issue Date: June 1, 2015

Change: Minor wording changes

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