Effective Date: May 10, 2016

Product #(s) –62804

Safety Data Sheet

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PolyGuard 10% Extreme Pro Pool Shock

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	IFON 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_2, 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	10%	7681-52-9
Sodium Hydroxide	0.2 – 2.0%	1310-18-5
Water	88 – 89.8%%	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 affects 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

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 (3rd 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, CO2, 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 my 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.

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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.

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^3	2mg/m^3	---

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).

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_20 = 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

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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.

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 LD50 Dermal	Rat Rabbit	8.91 g/kg > 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 Acute LC50 = 141ug/L Fresh Water	Fish Daphnia	96 hr 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: Limited Quantity
DOT/TDG Identification Number: Not applicable
DOT/TDG Hazard Class: Not applicable
DOT/TDG Packing Group: Not applicable
ERG Guide Number: Not applicable
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	10%	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

Issue Date: May 10, 2016
Previous Issue Date: June 1, 2015
Change: Updated Sec. 14

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