

## Material Safety Data Sheet

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### Section 1 – Chemical Product and Company Identification

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Product Name: GZN 1510 Part B  
 Product Use: Component of polyurethane.  
 Effective Date: 11/20/10

In an emergency call CHEMTREC @ 800-424-9300

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### Section 2 – Composition/Information on Ingredients

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Ingredients(s)	%(by wt.)	OSHA TLV(ACGIH)	CAS NO.
Non-Hazardous Proprietary Polyol Blend	up to 50%	Not Established	Mixture
Halogenated Aryl Esters	up to 6%	Not Established	Not Available*
Triaryl phosphate, isopropylated	up to 5%	Not Established	Not Available*
Triphenyl phosphate	0.5-2.5 %	3 mg/m3	115866

\* Component identities are listed a Trade Secret by the manufacturers.

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### Section 3 -- Hazards Identification

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#### Emergency Overview:

Color: Pale Green; Form: Liquid; Odor: Odorless; May cause allergic skin reaction. Mists generated by heat, violent agitation or spraying will irritate skin, eyes, nose, throat and respiratory system. This substance may be toxic to aquatic organisms. Do not release to water. Avoid releasing to environment.

**Routes of Entry:** Eye Contact, Skin Contact, Inhalation, Ingestion

#### Human Effects and Symptoms of Overexposure:

**Eye Contact:** May cause eye irritation or corneal damage in some individuals.

**Skin Contact:** May cause skin irritation.

**Inhalation:** May cause respiratory tract irritation, mucous membrane irritation and nervous system effects.

**Ingestion:** Expected to be harmful. May cause nervous system effects.

**Chronic Effects:** Long term oral overexposure may cause neurological effects and kidney damage based on animal data.

**Carcinogens:** None known.

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**Section 4 – First Aid Measures**

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<b>Eye Contact:</b>	Flush thoroughly with water for 15 minutes. Consult a physician.
<b>Skin Contact:</b>	Wash with soap and water. Remove contaminated clothing. (Wash before reuse.) If irritation develops, get medical attention.
<b>Inhalation:</b>	Remove victim to fresh air. Get medical attention.
<b>Ingestion:</b>	If swallowed, give person 1 to 2 glasses of water. Get medical attention immediately.

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**Section 5 – Fire Fighting Measures**

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<b>Flash Point:</b>	> 200° F Closed Cup (Pensky-Martens)
<b>Extinguishing Media:</b>	Apply alcohol-type or all-purpose-type foams by manufacturer's recommended techniques for large fires. Use CO2 or dry chemical media for small fires.
<b>Special Fire Fighting Procedures:</b>	Wear self-contained breathing apparatus and protective clothing to prevent skin and eye contact in fire situations. Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.
<b>Hazardous Decomposition Products:</b>	Hydrogen bromide and/or bromine, Oxides of phosphorous, CO, CO2

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**Section 6 – Accidental Release Measures**

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**For major spills call Chemtrec (800) 424-9300.**

**Spills, Leaks, or Releases:** Wearing appropriate personal protective equipment (See Section 8), collect spill with the aid of an inert absorbent and place in suitable labeled containers for disposal. Wash spill area after pick-up is complete, collecting all clean up water for appropriate disposal.

**Environmental Precautions:** Avoid releasing to the environment. Do not allow spills to enter surface waters (surface, rivers, ponds, lakes, etc.)

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**Section 7 – Handling and Storage**

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**Storage Precautions:** Store in cool, dry, well-ventilated area away from incompatible materials. Keep container closed to protect from contamination. Protect from atmospheric moisture by maintaining a nitrogen atmosphere.

**Handling Precautions:** Use appropriate personal protection equipment. Avoid eye, skin and clothing contact. Do not breathe mist or vapor. Avoid eye, skin and clothing contact. Avoid repeated or prolonged contact.

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**Section 8 – Exposure Controls/Personal Protection**

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<b>Eye Protection:</b>	Use chemical goggles.
<b>Skin Protection:</b>	Chemical resistant gloves. Clothing designed to minimize skin contact. Wash thoroughly after handling. Wash contaminated clothing before reuse.
<b>Respiratory Protection:</b>	Wear a NIOSH/MSHA approved organic/acid gas cartridge respirator if misting or vapor occurs. Consult the OSHA respiratory protection information located at 29CFR 1910.134 and the American National Standard Institute's Practices of Respiratory Protection Z88.2.
<b>Ventilation:</b>	Use local exhaust to minimize misting and vapor. Use mechanical ventilation for general area control.

## Section 9 – Chemical and Physical Properties

<b>Molecular Formula:</b> .....	Not applicable (mixture)
<b>Physical Form:</b> .....	Viscous Liquid
<b>Color:</b> .....	Pale Green/Phosphorescent
<b>Odor:</b> .....	Odorless
<b>Boiling Point:</b> .....	Not Established
<b>pH:</b> .....	Not Established
<b>Solubility:</b> .....	Partially Soluable
<b>Vapor Pressure:</b> .....	Not Established
<b>Vapor Density:</b> .....	Not Established
<b>Bulk Density:</b> .....	Not Established
<b>Specific Gravity:</b> .....	Not Established
<b>Viscosity:</b> .....	Not Established

## Section 10 – Stability and Reactivity

<b>Stability:</b>	This is stable material under normal conditions of handling and use.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibilities:</b>	Strong oxidizing materials, Strong acids, Strong bases, Isocyanates.
<b>Decomposition Products:</b>	Hydrogen bromide and/or bromine, oxides of phosphorous, oxides of nitrogen, carbon monoxide, carbon dioxide. Depending on temperature, air supply and presence of other materials hazardous decomposition products, may include but are not limited to: aldehydes, ketones, organic acids and polymer fragments.

## Section 11 – Toxicology Information

The toxicological properties of this blend have not been determined. Data has been calculated from available component information.

LD50 Oral (Rat) > 5000 mg/kg

## Section 12 – Ecological Information

This substance may be toxic to aquatic organisms. Do not release to water. Avoid releasing to environment. The precise ecological properties of this blend have not been tested as a whole. Data for individual components are detailed below.

**Halogenated Aryl Esters**

EC50 in *Daphnia magna* (24H) = 1.2 mg/L

EC50 in *Daphnia magna* (48H) = 0.42 mg/L

EC50 in *Selenastrum capricornutum* (96H) >5.1 mg/L

LC50 in Rainbow Trout (*Oncorhynchus mykiss*) (96H) >12 mg/L

The EC50 (respiration inhibition) of activated sewage sludge has been determined to be >100 mg/L for a three hour contact time. This material has not been found to be inhibitory to activated sewage sludge bacteria. The soil adsorption coefficient (KOC) for this material has been determined to be greater than 28840 at 20 degrees C. This result indicates that mobility in soil for this material is unlikely. In a flow-through bioconcentration test with rainbow trout (*Oncorhynchus mykiss*), steady-state BCF values ranged from 1.74 to 6.19, showing that this material did not significantly bioconcentrate. In a Shake Flask Die-Away Test, this material had half-lives in active water and active sediment test systems of 3.5 days and 8.5 days, respectively. Based on this information, this material is expected to readily biodegrade. In a closed bottle test, this material attained 6% biodegradation

within 28 days. In an abiotic hydrolysis study, the half-life of this material has been determined to be greater than 1 year at 25 degrees C at pH values of 4,7 and 9.

**Triaryl phosphate, isopropylated and Triphenyl phosphate:**

LC50 in rainbow trout (96H) = 1.6 (1.2 - 2.2) mg/L

LC50 in fathead minnow (96H) = 10.8 (8.0 - 14.6) mg/L

EC50 in Daphnia magna (48H) = 2.44 (1.93 - 3.08) mg/L

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Section 13 – Disposal Considerations

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**Waste Disposal Method:** Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Incineration is the preferred method.

**Empty Container Precautions:** Empty containers must be handled with care due to product residue. Do not heat or cut empty container with electric or gas torch.

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Section 14 – Transportation Information

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**US Dept of Transportation:**

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (contains triphenyl phosphate)

Hazard Class: 9

UN Number: UN3082

Packing Group: III

Labels Required: Miscellaneous, Marine Pollutant

ERG No. 171

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Section 15 – Regulatory Information

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The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. GlowZone Inc does not undertake to furnish advice on such matters.

**United States Federal Regulations:**

**US EPA CERCLA Hazardous Substances (40 CFR 302):**

Not Evaluated

**SARA Section 311/312 Hazard Categories:**

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Not Evaluated

**US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**

Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier Notification Required:

Not Evaluated

**State Right-To-Know Information:**

For details of your regulatory requirements you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**

Not Evaluated

**New Jersey Environmental Hazardous Substances List and/or New Jersey, RTK Special Hazardous Substances Lists:**

Not Evaluated

**California Proposition 65:**

This product contains levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

Benzene (trace)

Toluene (trace)

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**Section 16 – Other Information**

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HMIS Rating:        Health: 2\*        Flammability: 1        Reactivity: 1

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of GlowZone Inc's product safety program. It is not intended to constitute performance information concerning the product. No Express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

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Company: GlowZone Inc

Rev Date: 11/20/10