

## 1. Identification

Product Identifier: **Poly-Optic® 1410 Clear Casting Resin Part B**  
**Poly-Optic® 1411 Clear Casting Resin Part B**  
**Poly-Optic® 1412 Clear Casting Resin Part B**  
**Poly-Optic® 1411ES7 Clear Casting Resin Part B**  
**Poly-Optic® 1420 Clear Casting Resin Part B**  
**Poly-Optic® 14-70 Clear Casting Resin Part B**

Product Code(s): 1410B, 1411B, 1411ES7B, 1412B, 1420B, 1470B

Use: Component for Polyurethane Clear Casting Resin. For Industrial/Professional use only.

Manufacturer: Polytek Development Corp.  
 55 Hilton St., Easton, PA 18042

Phone Number: 610-559-8620 (9 a.m. to 5 p.m. EST)

Emergency Phone: CHEMTREC 800-424-9300 or +1 (703) 527-3887

E-mail: [sds@polytek.com](mailto:sds@polytek.com)

## 2. Hazards Identification

### GHS Classification:

Specific Target Organ Toxicity Repeated Exposure Category 2  
 Hazardous to the Aquatic Environment – Acute Hazard Category 3  
 Hazardous to the Aquatic Environment – Long-Term Hazard Category 3

Label Elements: Warning



Contains Phenylmercury compound

### Hazard Phrases

H373 May cause damage to organs (central nervous system) through prolonged or repeated exposure.  
 H412+ 413 Harmful to aquatic life; may cause long lasting harmful effects.

### Precautionary Phrases

P260 Do not breathe vapors.  
 P273 Avoid release to the environment.  
 P314 Get medical advice if you feel unwell.  
 P501 Dispose of contents and container in accordance with local, regional and national regulations.

**Supplemental Information:** This is one part of a two-part system. Read and understand the hazard information on part A before using.

## 3. Composition/Information on Ingredients

| Chemical Name   | CAS #       | %     |
|---|-------------|-------|
| Phenylmercury compound  | Proprietary | ≤0.5% |
| Other ingredients are not classified as health and/or environmental hazards, and/or are present below cut-off/concentration limits. |             |       |

## 4. First-Aid Measures

**Eye Contact:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation persists.

**Skin Contact:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation persists.

**Inhalation:** Remove person to fresh air. Get medical attention if symptoms persist.

**Ingestion:** Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

**Most Important Symptoms/Effects:** May cause mild eye and skin irritation. May be harmful if swallowed.

## Indication of Immediate Medical Attention/Special Treatment:

Immediate medical attention is not required.

## 5. Fire-Fighting Measures

**Extinguishing Media:** Use water fog, foam, carbon dioxide or dry chemical. Do not use direct water stream into hot product, since it may cause violent steam generation or eruption.

**Specific Hazards:** Not classified as flammable. Product will burn under fire conditions.

**Special Protective Equipment & Precautions for Fire-Fighters:** Wear positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

## 6. Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency

**Procedures:** Remove ignition sources. Clear non-emergency personnel from the area. Wear protective equipment to prevent eye and skin contact and avoid breathing vapors. Caution – spill area may be slippery.

**Methods and Materials for Containment and Cleanup:** Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid releases to the environment. Report spills and releases to appropriate authorities as required.

## 7. Handling and Storage

**Safe Handling:** Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

**Safe Storage:** Store indoors at temperatures between 15 and 35°C (60 and 95°F). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed.

## 8. Exposure Controls/Personal Protection

### Occupational Exposure Limits:

Mercury (applies to aryl compounds) 0.1 mg/m<sup>3</sup> (Ceiling) OSHA PEL  
 0.1 mg/m<sup>3</sup> TWA ACGIH TLV

**Ventilation:** Use with adequate general or local exhaust ventilation to minimize exposure levels.

**Respiratory Protection:** In the absence of good ventilation, use an approved respirator with organic vapor cartridges. Respirator selection and use should be based on contaminant type, form and concentration. For higher exposures, or in an emergency, use a supplied-air respirator.

**Skin Protection:** Wear impervious rubber (e.g., butyl or nitrile) gloves.

**Eye Protection:** Wear chemical safety glasses/goggles.

**Other Protective Measures:** Wear impervious clothing to prevent skin contact and contamination of personal clothing. An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

## 9. Physical and Chemical Properties

**Appearance:** Clear, pale yellow or violet liquid

**Odor:** Mild

**Odor Threshold:** No data available

**pH:** Not applicable

**Melting Point:** No data available

**Boiling Point:** No data available

**Flash Point:** >150°C/302°F (estimated)

**Evap. Rate:** No data available

**Flamm. Limits:** No data available

**Vapor Pressure:** <0.1 mm Hg @ 25°C

**Vapor Density:** No data available

**Relative Density:** 1.05 @ 25°C

**Solubility:** Negligible in water  
**Partition Coefficient: n-octanol/Water:** No data available  
**Auto-Ignition Temp:** No data available  
**Decomposition Temp:** No data available  
**Viscosity:** 176-1500 cP @ 25°C

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive.  
**Chemical Stability:** Stable under recommended conditions.  
**Possibility of Hazardous Reactions:** Reaction with strong oxidizers generates heat.  
**Conditions to Avoid:** Avoid excessive heat.  
**Incompatible Materials:** Avoid contact with strong oxidizers.  
**Hazardous Decomposition Products:** Thermal decomposition will generate oxides of carbon and mercury compounds.

## 11. Toxicological Information

**Eye Contact:** May cause irritation.  
**Skin Contact:** May cause mild irritation.  
**Inhalation:** Vapors or mists may cause mild respiratory irritation.  
**Ingestion:** Not fully determined, but single oral dose toxicity is low. Ingesting large amounts may cause adverse gastrointestinal effects.  
**Chronic Health Effects:** Not fully determined, but mercury is known to cause harm to the central nervous system and kidneys.  
**Acute Toxicity Values:** No data available for mixture. Phenylmercury compound: LD50 oral rat 70 mg/kg (no data for actual compound; this data is for a similar compound).  
**Respiratory Sensitization:** Components are not respiratory sensitizers.  
**Skin Sensitization:** Components are not skin sensitizers.  
**Germ Cell Mutagenicity:** Components are not known mutagens.  
**Carcinogenicity:** Components are not known carcinogens.  
**Reproductive Toxicity:** Components are not known reproductive toxins.  
**Specific Target Organ Toxicity:** Single Exposure: No data available. Repeat Exposure: Contains an organic mercury compound which causes damage to the central nervous system and kidneys.

## 12. Ecological Information

**Ecotoxicity:** This material is classified as harmful to aquatic organisms based on the concentration of Phenylmercury compound. (Hazardous to the Aquatic Environment – Acute and Long-Term Hazard Category 3)  
**Persistence and Degradability:** Phenylmercury compound is not readily biodegradable.  
**Bioaccumulative Potential:** Bioaccumulation of mercury is possible.  
**Mobility in Soil:** No data available.

## 13. Disposal Considerations

Dispose according to local, state and federal regulations. In the U.S., upon disposal, this product (uncured) is a characteristic RCRA hazardous waste (D009 - owing to mercury content) as defined in 40 CFR 261. Cured materials may be RCRA-regulated owing to mercury content.

## 14. Transport Information

Not regulated for transport by any mode.  
**Emergency Shipping Information:** Call CHEMTREC, 800-424-9300 or +1-703-527-3887

## 15. Regulatory Information

**U.S. FEDERAL REGULATIONS:**  
**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA TITLE III Section 311/312:** Chronic Health  
**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:  
Mercury Compound N458 ≤0.5%  
**Section 302 Extremely Hazardous Substances (TPQ):** None  
**EPA Toxic Substances Control Act (TSCA) Status:** Components in this product are listed on TSCA.

### STATE REGULATIONS:

**California Proposition 65:**  
**Poly-Optic® 1410 Clear Casting Resin Part B, Poly-Optic® 1411 Clear Casting Resin Part B, Poly-Optic® 14-70 Clear Casting Resin Part B**

**WARNING:** This product can expose you to chemicals including Phenylmercuric compounds and Lead, which are known to the State of California to cause cancer and/or reproductive harm.

[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**Poly-Optic® 1412 Clear Casting Resin Part B, Poly-Optic® 1411ES7 Clear Casting Resin Part B, Poly-Optic® 1420 Clear Casting Resin Part B**

**WARNING:** This product can expose you to chemicals including Phenylmercuric compound, which is known to the State of California to cause reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 16. Other Information

**Training Advice:** All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

**Recommended Uses and Restrictions:** This product is intended for industrial or professional use only.

**SDS Revision Notes:** Updated Prop 65 Warning, August 30, 2018; Reviewed/Removed partial Prop 65 warning. May 29, 2018/ Correction to PEL in Section 8 (Ceiling limit, not TWA).

**Disclaimer:** The information contained herein is considered accurate; however, Polytek® makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.