



## 1. Identification

Product Identifier: **BC-8590 Urethane Elastomer Part A**  
 Product Code(s): BC8590A  
 Use: Component for Mold Making and Casting. For Industrial/Professional use only.  
 Manufacturer: Polytek Development Corp.  
 55 Hilton Street, Easton, PA 18042  
 Phone Number: 610-559-8620 (8 a.m. to 6:30 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:

Acute Toxicity – Inhalation – Category 4  
 Skin Irritation – Category 2  
 Eye Irritation – Category 2B  
 Respiratory Sensitization – Category 1  
 Skin Sensitization – Category 1  
 Specific Target Organ Toxicity Single Exposure – Category 3  
 Specific Target Organ Toxicity Repeat Exposure – Category 2 (inhalation)

Label Elements: Danger



### Hazard Phrases:

H315 Causes skin irritation.  
 H320 Causes eye irritation.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 May cause an allergic skin reaction.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H373 May cause damage to lungs through prolonged or repeated exposure by inhalation.

### Precautionary Phrases:

P260 Do not breathe vapors.  
 P261 Avoid breathing vapors.  
 P264 Wash thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves.  
 P284 In case of inadequate ventilation, wear respiratory protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P319 Get medical help if you feel unwell.  
 P332+P317 If skin irritation occurs: Get medical help.  
 P333+P317 If skin irritation or rash occurs: Get medical help.  
 P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.

P501 Dispose of contents and container in accordance with local, regional and national regulations.

**Supplemental Information:** Individuals sensitized to isocyanates should discontinue use. Long-term overexposure to isocyanates may cause lung damage.

This is one part of a two-part system. Read and understand the hazard information on part B before using.

## 3. Composition/Information on Ingredients

Chemical Name	CAS #	%
4,4'-methylenediphenyl diisocyanate	101-68-8	80-100
Other ingredients are not classified as health, physical or environmental hazards, or are present below cut-off/concentrations limits.		

## 4. First-Aid Measures

**Eye Contact:** Rinse thoroughly with water for at least 15 minutes, holding the eyelids open to be sure the material is washed out. Get prompt medical attention.

**Skin Contact:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use. Discard items that cannot be decontaminated.

**Inhalation:** Do not breath vapors. If inhaled, remove person to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

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

**Most Important Symptoms/Effects:** Causes skin and eye irritation. Vapors may cause respiratory irritation. May cause allergic skin and/or respiratory reaction in sensitized persons. Symptoms include skin rash, wheezing, shortness of breath and other asthma symptoms. Prolonged inhalation overexposure may damage the lungs and respiratory system.

**Indication of Immediate Medical Attention/Special Treatment:** Immediate medical attention is required for asthmatic symptoms or serious inhalation exposures. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Persons sensitized to isocyanates should not use this product.

## 5. Fire-Fighting Measures

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

**Specific Hazards:** Not classified as flammable or combustible. Product will burn under fire conditions. Do not allow run-off from firefighting to enter drains or waterways.

**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 all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors. Ventilate area. 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. Do not seal the container since CO<sub>2</sub> is generated on contact

with moisture and dangerous pressure buildup can occur. Decontaminate floor area with a mixture of water plus isopropyl alcohol (20%), household ammonia (10%), and detergent (2%). Do not allow discharge to enter waterways.

## 7. Handling and Storage

**Safe Handling:** Avoid breathing vapors, aerosols and mists. Use with properly positioned local exhaust ventilation to prevent exposure. 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. Persons susceptible to skin sensitization problems or asthma allergies, chronic or recurrent respiratory disease should not use this product.

**Safe Storage:** Store indoors at temperatures between 55°F and 95°F. Store in original, unopened containers. Protect from atmospheric moisture and water since isocyanates react with water to form CO<sub>2</sub> leading to potentially dangerous pressure build up in sealed containers.

## 8. Exposure Controls/Personal Protection

### Occupational Exposure Limits:

Chemical Name	Exposure Limits
4,4'-methylenediphenyl diisocyanate	0.005 ppm TWA ACGIH TLV 0.02 ppm (C) OSHA PEL

**Ventilation:** Use with properly positioned local exhaust ventilation to prevent exposure and maintain air levels below the occupational exposure limits.

**Respiratory Protection:** If ventilation is not adequate, use an approved respirator with organic vapor cartridges or supplied air. 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 gloves, such as butyl rubber or nitrile rubber.

**Eye Protection:** Wear chemical safety 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 liquid

**Odor:** Mild odor

**Odor Threshold:** No data available

**pH:** Not applicable

**Melting Point/Freezing Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Evap. Rate:** No data available

**Flamm. Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** 1.20 @ 20°C

**Solubility:** Insoluble in water

**Partition Coefficient: n-octanol/Water:** No data available

**Auto-Ignition Temp:** No data available

**Decomposition Temp:** No data available

**Viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity:** Isocyanates react with many chemicals, including alcohols and amines, and the rate of reaction increases with temperature.

Reaction with water generates carbon dioxide and heat.

**Chemical Stability:** Stable under recommended conditions.

**Possibility of Hazardous Reactions:** Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by strong bases or water. Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.

**Conditions to Avoid:** Avoid moisture and temperatures below 55°F and above 95°F to protect product integrity and prevent pressure buildup in closed containers.

**Incompatible Materials:** Avoid contact with water, acids, bases, amines, and some metals (e.g., copper and copper alloys).

**Hazardous Decomposition Products:** Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke, Hydrogen cyanide (hydrocyanic acid).

## 11. Toxicological Information

**Eye Contact:** May cause eye irritation.

**Skin Contact:** Causes skin irritation. Skin contact may cause an allergic skin reaction. Animal studies indicate that skin contact with isocyanates may affect potential respiratory sensitization.

**Inhalation:** At room temperature, vapors are minimal due to low volatility. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation and possibly pulmonary edema. May cause respiratory sensitization. For individuals sensitized to isocyanates, exposure may result in allergic respiratory reactions (e.g., coughing, wheezing, difficulty breathing).

**Ingestion:** Single oral dose toxicity is low. Ingesting large amounts may cause adverse gastrointestinal effects.

**Chronic Health Effects:** Repeated or prolonged exposure to isocyanates above exposure limits may cause an allergic sensitization of the respiratory tract causing an asthma-like response upon re-exposure. Repeated overexposure to isocyanates has been associated with decreased lung function. Repeated or prolonged dermal contact with this product may cause allergic skin sensitization in some individuals.

**Acute Toxicity Values:** No toxicity data is available for this product. For 4,4'-methylenediphenyl diisocyanate (CAS 101-68-8):

Oral LC50 Rat: >2,000 mg/kg

Dermal LC50 Rat: >9,400 mg/kg

Inhalation LC50 Rat: 0.56 mg/L 4 hr (dust/mist)

**Respiratory Sensitization:** Isocyanates are respiratory sensitizers.

**Skin Sensitization:** Isocyanates are skin sensitizers.

**Germ Cell Mutagenicity:** Product has not been tested for mutagenicity. No ingredients are classified as mutagens.

**Carcinogenicity:** Product has not been tested for carcinogenicity. No ingredients are designated as carcinogens by NTP, IARC, or OSHA.

**Reproductive Toxicity:** Product has not been tested for reproductive toxicity. No ingredients present above cut-off levels are classified as reproductive toxins.

**Specific Target Organ Toxicity:**

Single Exposure: May cause respiratory irritation.

Repeat Exposure: After repeated exposure, isocyanates may cause respiratory irritation and lung damage.

## 12. Ecological Information

**Ecotoxicity:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** Isocyanates are not expected to bioaccumulate.

**Mobility in Soil:** No data available.

### 13. Disposal Considerations

Dispose according to local, state and federal regulations. Upon exposure to moisture, product forms an inert, non-hazardous solid.

### 14. Transport Information

U.S. DOT: NA3082, Other regulated substances, liquid, n.o.s (MDI), 9, III

Reportable Quantity (RQ): 5000lbs.

IMDG: Not regulated for transport.

AIR/IATA: Not regulated for transport.

**Emergency Shipping Information:** Call CHEMTREC, 800-424-9300 or +1-703-527-3887

### 15. Regulatory Information

#### U.S. FEDERAL REGULATIONS:

**CERCLA 103 Reportable Quantity:** RQ for MDI is 5000 lb. Some states have more stringent requirements. Report spills in accordance with local and state regulations.

**SARA TITLE III Section 311/312:** Acute Health, Chronic Health

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

4,4'-methylenediphenyl diisocyanate (CAS 101-68-8) 80-100%

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on TSCA.

#### STATE REGULATIONS:

**California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

### 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 use only.

**SDS Revision Notes:** GHS Format, November 21, 2019

**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.

## 1. Identification

Product Identifier: **BC-2001 Mahogany Adhesive Part B  
BC-8475 Urethane Elastomer Part B  
BC-8590 Urethane Elastomer Part B  
BC-8782 Urethane Elastomer Part B**

Product Code(s): BC2001B, BC8475B, BC8590B, BC8782B

Use: For Industrial/Professional use only.

Manufacturer: Polytek Development Corp.  
2140 Earlywood Drive, Franklin, IN 46131

Phone Number: 610-559-8620 (8 a.m. to 6:30 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:**  
Not hazardous per 29 CFR 1910.1200.

**Label Elements:** No GHS label required.

**Supplemental Information:** May cause mild skin and eye irritation.  
Read and understand the hazard information on Part A before using.

## 3. Composition/Information on Ingredients

Chemical Name	CAS #	%
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 develops and persists.

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

**Inhalation:** If breathing is difficult, remove person to fresh air. Get medical attention if you feel unwell.

**Ingestion:** Do not induce vomiting. Get medical attention if you feel unwell.

**Most Important Symptoms/Effects:** None known.

**Indication of Immediate Medical Attention/Special Treatment:** Not expected to be required.

## 5. Fire-Fighting Measures

**Extinguishing Media:** Carbon dioxide, dry chemical, foam.

**Specific Hazards:** Not classified as flammable or combustible.

**Special Protective Equipment and Precautions for Fire-Fighters:**  
Wear SCBA & full-body protective suit.

## 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Clear unnecessary, unprotected personnel from the area. Wear SCBA and protective clothing.

**Methods and Materials for Containment and Cleanup:** Contain spill and prevent/minimize release to the environment. Collect with inert absorbent and containerize material for disposal.

## 7. Handling and Storage

**Safe Handling:** Do not breathe vapors. Do not smoke, eat, or drink when using this product.

**Safe Storage:** Keep container tightly closed in a dry, well-ventilated area.

## 8. Exposure Controls/Personal Protection

**Occupational Exposure Limits:** None established.

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

**Respiratory Protection:** If needed, a NIOSH-approved respirator with organic vapor cartridges may be used. 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 clothing and gloves, such as butyl rubber or nitrile rubber.

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

**Other Protective Measures:** An eye wash facility and washing facility should be available in the work area. Wash hands at the end of each work shift and before eating, smoking or using the toilet. Follow applicable regulations and good Industrial Hygiene practice.

## 9. Physical and Chemical Properties

**Appearance:** Liquid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammable Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Solubility:** No data available

**Partition Coefficient: n-octanol/Water:** No data available

**Auto-Ignition Temp:** No data available

**Decomposition Temp:** No data available

**Viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under recommended conditions.

**Possibility of Hazardous Reactions:** No data available

**Conditions to Avoid:** No data available

**Incompatible Materials:** Avoid strong acids, strong bases, and strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), aldehydes, ketones, burning produces noxious and toxic fumes.

## 11. Toxicological Information

**Eye Contact:** May cause mild irritation.

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

**Inhalation:** May cause mild respiratory irritation.

**Ingestion:** No data available.

**Chronic Health Effects:** No data available.

**Acute Toxicity Values:** Not acutely hazardous.

**Germ Cell Mutagenicity:** No data available

**Carcinogenicity:** Relevant components are not listed as known or suspected carcinogens by NTP, IARC or OSHA.

**Reproductive Toxicity:** Relevant components are not known or suspected reproductive toxins.

Date Prepared/Revised: January 13, 2020

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**Specific Target Organ Toxicity:** No data available.

## 12. Ecological Information

**Ecotoxicity:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** Not expected to migrate.

## 13. Disposal Considerations

Dispose according to local, regional and national regulations.

## 14. Transport Information

Not regulated for transport in 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:** 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:**

**Hazard Category for Section 311/312:** Chronic Health Hazard

**Section 313 Toxic Chemicals:** Contains no chemicals subject to SARA Title III Section 313 Reporting requirements.

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All components are listed on TSCA.

**STATE REGULATIONS:**

**California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer and/or reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 16. Other Information

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

**Recommended Uses and Restrictions:** Intended for industrial or professional use only.

**SDS Revision Notes:** GHS format December 26, 2019.

**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.



**1. Identification**

Product Identifier: **BP-2019 Laminating Epoxy Resin**  
 Product Code(s): BC2019R  
 Use: Epoxy resin for epoxy system.  
 For Industrial/Professional use only.  
 Manufacturer: Polytek Development Corp.  
 2140 Earlywood Drive, Franklin, IN 46131  
 Phone Number: 610-559-8620 (8 a.m. to 6:30 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:**  
 Skin Irritation Category 2  
 Eye Irritation Category 2A  
 Skin Sensitizer Category 1  
 Reproductive Toxin – Category 2  
 Hazardous to the Aquatic Environment – Chronic Hazard Category 2

**Label Elements:** Warning



**Hazard Phrases**

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H411 Toxic to aquatic life with long lasting effects.

**Precautionary Phrases**

- P203 Obtain, read and follow all safety instructions before use.
- P261 Avoid breathing fumes or vapors.
- P264 Wash hands and contacted areas thoroughly after handling.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves and eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P333+P317 If skin irritation or rash occurs: Get medical help.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P318 IF exposed or concerned, get medical advice.
- P337+P317 If eye irritation persists: Get medical help.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P273 Avoid release to the environment.
- P391 Collect spillage.
- P405 Store locked up.
- 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 curative before using.

**3. Composition/Information on Ingredients**

Chemical Name	CAS #	%
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	28085-99-8	80-90
Oxirane, Mono[[(C12-14-alkyloxy)methyl]	68609-97-2	5-15
Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-	3101-60-8	0-10
Malachite Green	569-64-2	0-5

**4. First-Aid Measures**

**Eye Contact:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. 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. Launder contaminated clothing before reuse.  
**Inhalation:** Remove person to fresh air. Get medical attention if symptoms develop or persist.  
**Ingestion:** Do not induce vomiting. Get medical attention if you feel unwell.  
**Most Important Symptoms/Effects:** May cause an allergic skin reaction.  
**Indication of Immediate Medical Attention/Special Treatment:** Treat symptoms.

**5. Fire-Fighting Measures**

**Extinguishing Media:** Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.  
**Specific Hazards:** Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.  
**Special Protective Equipment & Precautions for Fire-Fighters:** Wear positive pressure, self-contained breathing apparatus and full-body protective clothing.

**6. Accidental Release Measures**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Clear unnecessary, unprotected personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors.  
**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.

**7. Handling and Storage**

**Safe Handling:** Use with adequate ventilation. Avoid contact with 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 below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed.

**8. Exposure Controls/Personal Protection**

**Occupational Exposure Limits:** None established.  
**Ventilation:** Use with adequate general or local exhaust ventilation to minimize exposure levels.  
**Respiratory Protection:** If needed, an approved respirator with organic vapor cartridges may be used. 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 gloves, such as butyl rubber or nitrile rubber.  
**Eye Protection:** Wear chemical safety glasses/goggles.  
**Other Protective Measures:** 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:** Liquid  
**Odor:** Epoxy  
**Odor Threshold:** No data available  
**pH:** Not determined  
**Melting Point:** No data available  
**Boiling Point:** No data available  
**Flash Point:** No data available  
**Evap. Rate:** No data available  
**Upper/Lower Flammability Limits:** No data available  
**Vapor Pressure:** <0.03 mm Hg @ 25°C  
**Vapor Density:** >1 (Air = 1)  
**Relative Density:** No data available  
**Solubility:** Nil to slightly soluble in water  
**Partition Coefficient: n-octanol/Water:** 3 (log Pow)  
**Auto-Ignition Temp:** No data available  
**Decomposition Temp:** No data available  
**Viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive.  
**Chemical Stability:** Stable under recommended conditions. After prolonged storage, may crystallize.  
**Possibility of Hazardous Reactions:** Masses of  $\geq 1$  lb (0.5 kg) plus aliphatic amine will cause irreversible polymerization with considerable heat build-up. Material will polymerize with sodium hydroxide.  
**Conditions to Avoid:** Avoid excessive heat.  
**Incompatible Materials:** Avoid contact with strong oxidizing agents, acids, alkalis, amines, mercaptans.  
**Hazardous Decomposition Products:** Uncontrolled exothermic reaction of epoxy resin releases carbon monoxide, carbon dioxide, phenolics, and aldehydes.

## 11. Toxicological Information

**Eye Contact:** Causes serious eye irritation.  
**Skin Contact:** Causes skin irritation. May cause sensitization. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Inhalation:** Vapors from heated product may cause respiratory irritation.  
**Ingestion:** No data available.  
**Chronic Health Effects:** Allergic skin reaction.  
**Acute Toxicity Values:** For Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]- (CAS 3101-60-8)  
Oral LD<sub>50</sub> Rat: >2,000 mg/kg  
Dermal LD<sub>50</sub> Rabbit: >2,000 mg/kg  
For Oxirane, Mono[[[C12-14-alkyloxy]methyl] (CAS 68609-97-2)  
Oral LD<sub>50</sub> Rat: >17,100 mg/kg  
For Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers (CAS 28085-99-8)  
Oral LD<sub>50</sub> Rat: >15,000 mg/kg  
Dermal LD<sub>50</sub> Rabbit: 23,000 mg/kg  
**Respiratory Sensitization:** Components are not respiratory sensitizers.  
**Skin Sensitization:** Causes allergic skin reaction.  
**Germ Cell Mutagenicity:** Components are not mutagens.  
**Carcinogenicity:** Components are not carcinogens.  
**Reproductive Toxicity:** Product contains Malachite Green (CAS 569-64-2), a chemical suspected of damaging fertility or the unborn child.  
**Specific Target Organ Toxicity:** Not classified based on available data.

## 12. Ecological Information

**Ecotoxicity:** Toxic to aquatic life with long lasting effects. Do not release into waterways.  
**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.  
**Mobility in Soil:** No data available.

## 13. Disposal Considerations

Dispose according to local, state and federal regulations. Do not dump in drains or sewers.

## 14. Transport Information

**U.S.:** UN 3082, Environmentally hazardous substance, liquid, n.o.s. (epoxy resin, aliphatic C12-C14 glycidyl ether, Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-), 9, III, MARINE POLLUTANT. Not regulated as a hazardous material by US DOT in containers of 55-gal or less.

**International shipments:** UN 3082, Environmentally hazardous substance, liquid, n.o.s. (epoxy resin, aliphatic C12-C14 glycidyl ether, Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-), 9, III, MARINE POLLUTANT. Excepted from IMDG and IATA regulations in containers of 5 liters or less (see IATA SP A197 and IMDG 2.10.2.7).

**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.

### SARA TITLE III

**Section 311/312:** Acute and Chronic Health

**Section 313 Toxic Chemicals:** This product contains no chemicals subject to SARA Title III Section 313 Reporting requirements.

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All components in this product are listed on TSCA.

### STATE REGULATIONS:

**California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer and/or 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/professional use only.

**SDS Revision Notes:** GHS Classification, December 3, 2019

**Disclaimer:** The information contained herein is considered accurate; however, Polytek® Development Corp. 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.



## 1. Identification

Product Identifier: **BP-2014 Laminating Epoxy Hardener**  
**BP-2019 Laminating Epoxy Hardener**

Product Code(s): BC2014H, BC2019H

Use: Epoxy Curing Agent. For Industrial/Professional use only.

Manufacturer: Polytek Development Corp.  
2140 Earlywood Drive, Franklin, IN 46131

Phone Number: 610-559-8620 (8 a.m. to 6:30 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:

Acute Toxicity (Dermal) – Category 4  
Skin Corrosion – Category 1B  
Skin Sensitization – Category 1  
Germ Cell Mutagenicity – Category 2  
Reproductive Toxin – Category 1B  
Hazardous to the Aquatic Environment – Acute Hazard Category 2  
Hazardous to the Aquatic Environment – Chronic Hazard Category 2

Label Elements: Danger



### Hazard Phrases:

H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H341 Suspected of causing genetic defects.  
H360 Suspected of damaging fertility or the unborn child.  
H401 Toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

### Precautionary Phrases:

P203 Obtain, read and follow all safety instructions before use.  
P261 Avoid breathing fumes or vapors.  
P264 Wash hands thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P302+P361+P354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P316 Get emergency medical help immediately.  
P317 Get medical help.  
P318 IF exposed or concerned, get medical advice.  
P333+P317 If skin irritation or rash occurs: Get medical help.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P363 Wash contaminated clothing before reuse.  
P391 Collect spillage.

P405 Store locked up.  
P501 Disposal of contents/container to be specified in accordance with regulations.

**Supplemental Information:** Read and understand the hazard information on Part A before using.

## 3. Composition/Information on Ingredients

Chemical Name	CAS #	%
Di-n-Butyl Phthalate	84-74-2	0-10
Triethylenetetramine	112-24-3	50-60
O-Cresyl glycidyl ether	2210-79-9	30-40

Exact concentrations are withheld as trade secret. Other ingredients are not classified as health, physical or environmental hazards, or are present below cut-off/concentration limits.

## 4. First-Aid Measures

**Eye Contact:** Rinse thoroughly with water for 20 minutes, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation develops and persists.  
**Skin Contact:** Wash contact area thoroughly with soap and water for 20 minutes. Take off contaminated clothing and shoes. Get medical attention if irritation develops and persists. Laundry clothing before reuse. Discard clothing that cannot be decontaminated.  
**Inhalation:** If breathing is difficult, remove person to fresh air. If experiencing difficulty breathing, call a doctor.  
**Ingestion:** If swallowed, rinse mouth. Do not induce vomiting.  
**Most Important Symptoms/Effects:** Skin disorders, allergies, adverse skin effects such as rash, irritation, or corrosion.  
**Indication of Immediate Medical Attention/Special Treatment:** Get emergency medical help if in contact with skin and/or eyes.

## 5. Fire-Fighting Measures

**Extinguishing Media:** Carbon dioxide, dry chemical, alcohol-resistant foams, dry sand or limestone powder.  
**Specific Hazards:** Not classified as flammable or combustible. May generate ammonia or toxic nitrogen oxide gases in fire conditions. Incomplete combustion may form carbon monoxide. Burning produces noxious and toxic fumes.  
**Special Protective Equipment and Precautions for Fire-Fighters:** Wear SCBA & full-body protective suit.

## 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Use SCBA and chemically protective clothing. Clear unnecessary, unprotected personnel from the area.  
**Methods and Materials for Containment and Cleanup:** Contain spill and prevent/minimize release to the environment. Collect and containerize material for disposal.

## 7. Handling and Storage

**Safe Handling:** Avoid contact with eyes and skin. Use in a ventilated area. Wash hands after handling.  
**Safe Storage:** Keep containers tightly closed in a dry, well-ventilated area.



## 8. Exposure Controls/Personal Protection

**Occupational Exposure Limits:** For Di-n-Butyl Phthalate (CAS 84-74-2):

OSHA PEL	5 mg/m <sup>3</sup> TWA
ACGIH TLV	5 mg/m <sup>3</sup> TWA

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

**Respiratory Protection:** If needed, a NIOSH-approved respirator with organic vapor cartridges may be used. 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 clothing and gloves, such as butyl rubber or nitrile rubber.

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

**Other Protective Measures:** Prevent skin contact and contamination of personal clothing. An eye wash facility and washing facility should be available in the work area. Wash hands at the end of each work shift and before eating, smoking or using the toilet. Follow applicable regulations and good Industrial Hygiene practice.

## 9. Physical and Chemical Properties

**Appearance:** Liquid

**Odor:** No data available.

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammable Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Solubility:** No data available

**Partition Coefficient: n-octanol/Water:** No data available

**Auto-Ignition Temp:** No data available

**Decomposition Temp:** No data available

**Viscosity:** No data available

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under recommended conditions.

**Possibility of Hazardous Reactions:** No data available

**Conditions to Avoid:** No data available

**Incompatible Materials:** Organic acids, mineral acids, oxidizing agents, nitrous acid and other nitrosating agents. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. N-Nitrosamines, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

**Hazardous Decomposition Products:** Nitric acid, ammonia, nitrogen oxides, carbon monoxide, carbon dioxide, nitrosamine,

## 11. Toxicological Information

**Eye Contact:** Causes serious eye damage.

**Skin Contact:** Causes severe skin burns. May cause allergic skin reaction.

**Inhalation:** No data available.

**Ingestion:** No data available.

**Chronic Health Effects:** Allergic skin reaction.

**Acute Toxicity Values:** For Di-n-Butyl Phthalate (CAS 84-74-2):

Oral LD<sub>50</sub> (rat): 8,000 mg/kg

Dermal LD<sub>50</sub> (rabbit): 20,860 mg/kg

Inhalation LC<sub>50</sub> (rat): 4,250 mg/kg

For Triethylenetetramine (CAS 112-24-3):

Oral LD<sub>50</sub> (rat): 2,500 mg/kg

Dermal LD<sub>50</sub> (rabbit): 550 mg/kg

For [[(2-Methylphenoxy)methyl]oxirane] (CAS 2210-79-9):

Oral LD<sub>50</sub> (rat): 4,000 mg/kg

Inhalation LC<sub>50</sub> (rat): 6.09 mg/L 4 hr

**Germ Cell Mutagenicity:** Product contains [[(2-Methylphenoxy)methyl]oxirane] (CAS 2210-79-9), a chemical suspected of causing genetic defects.

**Carcinogenicity:** Relevant components are not listed as known or suspected carcinogens by NTP, IARC or OSHA.

**Reproductive Toxicity:** Product contains Di-n-Butyl Phthalate (CAS 84-74-2), a chemical suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity:** Relevant components are not known or suspected toxins to specific target organs.

## 12. Ecological Information

**Ecotoxicity:** Toxic to aquatic life with long lasting effects. Do not release into waterways.

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** Not expected to migrate.

## 13. Disposal Considerations

Dispose according to local, regional and national regulations.

## 14. Transport Information

**DOT:** UN1760, Corrosive, liquid, n.o.s. (triethylenetetramine), 8, II, MARINE POLLUTANT

**IMDG:** UN1760, Corrosive, liquid, n.o.s. (triethylenetetramine), 8, II, MARINE POLLUTANT

**IATA:** UN1760, Corrosive, liquid, n.o.s. (triethylenetetramine), 8, II, MARINE POLLUTANT

**Emergency Shipping Information:** Call CHEMTREC, 800-424-9300 or +1-703-527-3887

## 15. Regulatory Information

**U.S. FEDERAL REGULATIONS:**

**CERCLA 103 Reportable Quantity:** Di-n-Butyl Phthalate RQ is 10 lbs. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** Acute and Chronic Health Hazard

**Section 313 Toxic Chemicals:** Contains chemicals subject to SARA Title III Section 313 Reporting requirements:

Di-n-Butyl Phthalate (CAS 84-74-2) 0-10%

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All components are listed on TSCA.

**STATE REGULATIONS:**

**California Proposition 65:** WARNING: This product contains Di-n-Butyl Phthalate (CAS 84-74-2), a chemical 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 these products should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

**Recommended Uses and Restrictions:** Intended for industrial or professional use only.

**SDS Revision Notes:** GHS format December 30, 2019.

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