

**CLEAR COAT EPOXY RESIN**

This product appears in the following stock number(s):

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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Tradename: CLEAR COAT EPOXY RESIN

General use: This information applies to the resin component of the two-part kit; handle freshly-mixed resin and hardener as recommended for the hardener. After curing, the product is not hazardous.

Chemical family: Epoxy resin

**MANUFACTURER**ITW Devcon  
30 Endicott St.  
Danvers, MA 01923**EMERGENCY INFORMATION**Emergency telephone number  
(CHEMTREC): (800) 424-9300  
Other Calls: (978) 777-1100**2. COMPOSITION/INFORMATION ON INGREDIENTS****HAZARDOUS CONSTITUENTS****Exposure limits**

Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Butyl glycidyl ether	BGE	2426086	1-10	25 ppm	50 ppm	25 ppm (Canada)
Bisphenol A diglycidyl ether resin	DGEBPA	25068386	20-50	n/e	n/e	n/e
Trade Secret Acrylate		TRADE SECRET	1-10	n/e	n/e	n/e
Methanol		67561	<1	200 ppm	200 ppm	200 ppm (Canada)

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (\*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

**3. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance, form, odor: viscous liquid with little odor.

**WARNING!** Eye and skin irritant. Potential skin sensitizer.**Potential health effects**Primary routes of exposure: ☒ Skin contact ☒ Skin absorption ☒ Eye contact ☒ Inhalation ☐ Ingestion**Symptoms of acute overexposure:****Skin:** Moderate irritant. Contact at elevated temperatures can cause thermal burns. May cause skin sensitization (rashes, hives).

**Eyes:** Moderate irritant. May cause conjunctivitis or corneal damage. Contact at elevated temperatures can cause thermal burns.

**Inhalation:**

May cause irritation in the respiratory tract.

**Ingestion:**

Acute oral toxicity is low. May cause gastric distress.

**Effects of chronic overexposure:**

Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure. Studies have shown bisphenol A diglycidyl ether resin to be a sensitizing agent causing allergic contact dermatitis. Eye effects may include conjunctivitis or corneal damage. BGE may cause CNS depression (giddiness, headache, dizziness, nausea) or respiratory tract sensitization (wheezing, shortness of breath, cough) by inhalation if significantly exposed.

**Carcinogenicity -- OSHA regulated:** No

**ACGIH:** No

**National Toxicology Program:** No

**International Agency for Research on Cancer:** No

**Cancer-suspect constituent(s) :** None

**Medical conditions which may be aggravated by exposure:**

Preexisting eye and skin disorders. Development of preexisting skin or lung allergy symptoms may increase.

**Other effects:**

See section 11.

#### 4. FIRST AID MEASURES

**First aid for eyes:**

Flush eye with clean water for at least 15 minutes while gently holding eyelids open. Get immediate medical attention.

**First aid for skin:**

Immediately remove contaminated clothing and excess contaminant. Flush skin with water. Wash thoroughly with soap and warm water. Consult a physician if irritation develops.

**First aid for inhalation:**

Remove patient to fresh air. Administer oxygen if breathing is difficult. Get medical attention if symptoms persist.

**First aid for ingestion:**

Do NOT induce vomiting. Give two glasses of water to dilute if patient is conscious. Get medical attention.

**Note to physician :**

In general, emesis induction is unnecessary in high viscosity, low volatility products, e.g., neat epoxy resins.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media:**

☐ Water

☒ Carbon dioxide

☒ Dry chemical

☒ Foam

☐ Alcohol foam

**Flash Point (°F):** > 200

**Method:** PMCC

**Explosive limits in air (percent) -- Lower:** n/d

**Upper:** n/d

**Special firefighting procedures:**

Material will not burn unless preheated. Do not enter confined space without full bunker gear. Firefighters should wear self-contained breathing apparatus and protective clothing. Cool fire exposed containers with water.

**Unusual fire and explosion hazards:**

Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 500 deg F may cause polymerization.

**Hazardous products of combustion:**

When heated to decomposition it emits fumes of Cl<sup>-</sup>, carbon monoxide, other fumes and vapors varying in composition and toxicity.

**6. ACCIDENTAL RELEASE MEASURES****Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

**Containment:**

Dike, contain and absorb with clay, sand or other suitable material.

**Cleanup:**

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly. Flush area with water to remove trace residue. Clean-up waste water should be placed in appropriate containers for proper disposal.

**Special procedures:**

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Collect run-off water and transfer to drums or tanks for later disposal. Notify local health authorities and other appropriate agencies if such contamination occurs.

**7. HANDLING AND STORAGE****Handling precautions:**

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after using and particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing and protective gear before reuse. Discard contaminated leather articles. Handle mixed resin and hardener in accordance with the potential hazard of the curing agent used. Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against silica dust during sanding/grinding of cured product.

**Storage:**

Store in a cool, dry area away from high temperatures and flames. Keep container tightly closed when not in use.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering controls****Ventilation :**

Local exhaust ventilation is preferred although good general mechanical ventilation is usually adequate for most industrial applications. Local exhaust is recommended for confined areas.

**Other engineering controls :**

Have emergency shower and eye wash available.

**Personal protective equipment****Eye and face protection:**

Safety glasses with side shields.

**Skin protection:**

Chemical-resistant gloves and other gear as required to prevent skin contact.

**Respiratory protection:**

None needed in normal use with proper ventilation. In poorly ventilated areas use NIOSH approved organic vapor

cartridge respirator for uncured resin, dust/particle respirator during grinding/sanding operations for cured resin, or fresh airline respirator as exposure levels dictate (see OSHA 1910.134).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	1.1-1.3	Boiling point (°F):	> 300
Melting point (°F):	n/d	Vapor density (air = 1):	>1
Vapor pressure (mmHg):	< 1 mm Hg at 70 °F	Evaporation rate (butyl acetate = 1):	n/d
VOC (grams/liter):	n/d	Solubility in water:	Negligible
Percent volatile by volume:	n/d	pH (5% solution or slurry in water):	neutral
Percent solids by weight:	n/d		

## 10. STABILITY AND REACTIVITY

This material is chemically stable. Hazardous polymerization will not occur.

### Conditions to avoid :

Open flame and extreme heat

### Incompatible materials:

Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).

### Hazardous products of decomposition:

Oxides of carbon and nitrogen; aldehydes, acids, nitric acid, nitriles, amides and other organic substances may be formed during combustion.

### Conditions under which hazardous polymerization may occur:

Heat is generated when resin is mixed with curing agents; Run-a-way cure reactions may char and decompose the resin, generating unidentified fumes and vapors which may be toxic.

## 11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 (rat): > 1000 mg/kg estimate

Acute dermal effects: LD50 (rabbit): > 1000 mg/kg estimate

Acute inhalation effects: LC50 (rat): Not determined

Exposure: 8 hours.

### Eye irritation:

No data available.

### Subchronic effects:

BGE: In a 28 day rat inhalation study, showed decreased body weight and changes in blood chemistry at 188 ppm

and severe upper respiratory tract irritation at both 94 ppm and 188 ppm.

**Carcinogenicity, teratogenicity, and mutagenicity:**

Both the resin and the diglycidyl ether of bisphenol A (a component of this product) have proved to be inactive when tested by In Vivo mutagenicity assays. Both have shown activity by In Vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. BGE tested positive in a number of In Vitro genetic toxicity assays with and without metabolic activation.

**Other chronic effects:**

2-year bioassays in mice exposed by the dermal route to EPON 828, DGEBA, or other commercial resins yielded limited evidence of weak carcinogenicity. The authors concluded that the renal tumor evidence with EPON 828 "was of no biological significance" and that the resin "is not a systemic carcinogen when applied to the dorsal skin of CF1 mice." Rats exposed to BGE at 150 ppm for 50 7-hr showed retarded growth, 50% mortality at 300 ppm (additional signs of toxicity in survivors), and testicular atrophy at 300 ppm (but rats were juvenile).

**Toxicological information on hazardous chemical constituents of this product:**

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 4hr, (rat)
Butyl glycidyl ether	1660 mg/kg	788 mg/kg	1456
Bisphenol A diglycidyl ether resin	11.4 g/kg	>20 ml/kg	no deaths
Trade Secret Acrylate	n/d	n/d	n/d
Methanol	5628 mg/kg	15800 mg/kg	64000 ppm

'n/d' = 'not determined'

**12 ECOLOGICAL INFORMATION****Ecotoxicity:**

No data available.

**Mobility and persistence:**

No data available.

**Environmental fate:**

No data available.

**13. DISPOSAL CONSIDERATIONS**

Please see also Section 15, Regulatory Information.

**Waste management recommendations:**

If this resin becomes a waste, it would not be a hazardous waste by RCRA criteria (40CFR 261). Dispose of according to applicable federal, state, and local regulations.

**14. TRANSPORT INFORMATION**

Proper shipping name: Non-regulated  
Technical name : N/A  
Hazard class : N/A  
UN number: N/A  
Packing group: N/A  
Emergency Response Guide no.: N/A  
IMDG page number: N/A  
Other:

**15. REGULATORY INFORMATION****U.S. Federal Regulations****TSCA**

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

The following RCRA code(s) applies to this material if it becomes waste:

None

Regulatory status of hazardous chemical constituents of this product:

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Butyl glycidyl ether	No	No	0.0	Required
Bisphenol A diglycidyl ether resin	No	No	0.0	Not required
Trade Secret Acrylate	No	No	0.0	Not required
Methanol	No	Yes	0.0	Not required

\*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance list.

\*\*Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

For purposes of SARA Section 312 hazardous materials inventory reporting, the following hazard classes apply to this material: - Immediate health hazard – Delayed health hazard -

**Canadian regulations**

WHMIS hazard class(es) : D2B

**16. OTHER INFORMATION**

Hazardous Materials  
Identification System (HMIS)  
ratings:

**Health****2\*****Flammability****1****Reactivity****1**

The information and recommendations in this document are based on the best information available to us at the time of preparation, but we make no other warranty, express or implied, as to its correctness or completeness, or as to the results of reliance on this document.

