



SDS: 0018469  
Date Prepared: 01/31/2014

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** EBECRYL® 9160 radiation curing resins  
**Synonyms:** None  
**Chemical Family:** Acrylated oligomer  
**Molecular Formula:** Mixture  
**Molecular Weight:** Mixture

Allnex USA Inc., 9005 Westside Parkway, Alpharetta, Georgia 30009, USA

**For Product and all Non-Emergency Information call** your local Allnex contact point or contact us at <http://www.allnex.com/contact>

**EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:**

**Asia Pacific:**

Australia: +61 2801 44558 (Carechem 24)  
China (PRC): +86(0)532-8388-9090 (NRCC)  
Japan: +81 345 789 341 (Carechem 24)  
New Zealand: +64 9929 1483 (Carechem 24)  
All Others: +65 3158 1074 (Carechem 24)

**Europe/Africa/Middle East (Carechem 24):**

Europe, Middle East, Africa, Israel: +44 (0) 1235 239 670  
Middle East, Africa (Arabic speaking countries): +44 (0) 1235 239 671

**Latin America (Carechem 24):**

Brazil: +55 113 711 9144  
Mexico and all others: +52-555-004-8763

**Canada and USA (Carechem 24 - Allnex29003-NCEC):** +1-866-928-0789 (toll free) or +1-215-207-0061

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### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**APPEARANCE AND ODOR:**

Color: clear colorless to light straw  
Appearance: liquid  
Odor: acrylate

**STATEMENTS OF HAZARD:**

WARNING! CAUSES EYE AND SKIN IRRITATION  
MAY CAUSE RESPIRATORY TRACT IRRITATION  
MAY CAUSE ALLERGIC SKIN REACTION

#### POTENTIAL HEALTH EFFECTS

**EFFECTS OF EXPOSURE:**

The estimated acute oral (rat) LD50, acute dermal (rabbit) LD50 and 4-hour inhalation (rat) LC50 values for this material are > 2,0000 mg/kg, > 2,000 mg/kg and >5 mg/l, respectively. Direct contact with this material may cause moderate eye and skin irritation. Repeated or prolonged dermal contact may cause allergic skin reactions. Inhalation may cause respiratory tract irritation. The toxicological properties of this material have not been fully investigated. Refer to Section 11 for toxicology information on the regulated components of this product.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### OSHA REGULATED COMPONENTS

Component / CAS No.	%	Carcinogen
Tripropylene glycol diacrylate 42978-66-5	40 - 50	-

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### 4. FIRST AID MEASURES

**General Information:**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention immediately.

**Skin Contact:**

Wash immediately with plenty of water and soap. Remove contaminated clothing and shoes without delay. Obtain medical attention. Do not reuse contaminated clothing without laundering. Destroy or thoroughly clean shoes before reuse.

**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

**Inhalation:**

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:**

Use water spray, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

**Extinguishing Media to Avoid:**

high pressure water jet.

**Protective Equipment:**

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

**Special Hazards:**

Keep containers cool by spraying with water if exposed to fire.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

**Methods For Cleaning Up:**

Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

**Environmental Precautions:**

Use appropriate containment to avoid environmental contamination.

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## 7. HANDLING AND STORAGE

**HANDLING**

**Precautionary Measures:** Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep container tightly closed. Use with adequate ventilation. Wash thoroughly after handling.

**Special Handling Statements:** Product exposed to sunlight will slowly polymerize.

**STORAGE**

Store under air. The stabilizer is only effective in the presence of oxygen. Keep storage area well ventilated.

**Storage Temperature:** Store at 4 - 40 °C

**Reason:** Quality.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures:**

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure when spraying or curing at elevated temperatures.

**Respiratory Protection:**

For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment.

Recommended respirators include those certified by NIOSH.

Recommended: Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)

**Eye Protection:**

Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

**Skin Protection:**

Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Barrier creams may be used in conjunction with the gloves to provide additional skin protection.

**Hand Protection:**

Wear protective gloves. Recommendations are listed below. Other protective materials may be used based on user's own risk assessment. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.

Gloves for repeated or prolonged exposure: Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: up to 480 min

Gloves for short term exposure: Nitrile rubber (NBR), thickness: 0.1 mm, break through time: up to 30 min

The chemical resistance depends on the type of product and amount of product on the glove. Therefore gloves need to be changed when in contact with chemicals.

Not suitable gloves: Latex gloves

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.

**Additional Advice:**

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

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**Exposure Limit(s)**

No values have been established.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Color:</b>	clear colorless to light straw
<b>Appearance:</b>	liquid
<b>Odor:</b>	acrylate
<b>Boiling Point:</b>	>100 °C
<b>Melting Point:</b>	<0 °C
<b>Vapor Pressure:</b>	0.013hPa @ 20 °C
<b>Specific Gravity/Density:</b>	1.13
<b>Vapor Density:</b>	Not available
<b>Percent Volatile (% by wt.):</b>	Not available
<b>pH:</b>	Not available
<b>Saturation In Air (% By Vol.):</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Solubility In Water:</b>	slightly soluble
<b>Volatile Organic Content:</b>	Not available
<b>Flash Point:</b>	>100 °C      Setaflash
<b>Flammable Limits (% By Vol):</b>	Not available
<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Odor Threshold:</b>	Not available

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**10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Avoid direct exposure to sunlight. Loss of dissolved air. Loss of polymerization inhibitor.
<b>Polymerization:</b>	May occur
<b>Conditions To Avoid:</b>	Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers. Hazardous polymerization can occur when exposed to direct sunlight. Hazardous exothermic polymerization can occur when heated.
<b>Materials To Avoid:</b>	Avoid contact with peroxides. Copper, copper alloys, carbon steel, iron and rust. Avoid free radical producing initiators. They give an exothermic reaction with the product. Unintentional contact with them should be avoided.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide Carbon monoxide (CO)

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## 11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 2. HAZARDS IDENTIFICATION. Toxicological information on the regulated components of this product is as follows:

Tripropylene glycol diacrylate has acute oral (rat) LD50 and acute dermal (rabbit) LD50 values of 6800 mg/kg and >2000 mg/kg, respectively. Direct contact causes skin and eye irritation. Overexposure to vapor or mist may cause respiratory irritation. Repeated contact may cause skin sensitization (allergic skin reaction). This material was not clastogenic in an in vivo mouse micronucleus assay.

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## 12. ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The ecological assessment for this material is based on an evaluation of its components.

### ECOTOXICITY

Not available

### BIOACCUMULATIVE POTENTIAL

Not available

### PERSISTENCE AND DEGRADABILITY

Not available

### MOBILITY IN SOIL

Not available

### OTHER ADVERSE EFFECTS

### HAZARD TO THE OZONE LAYER

Not available

## 13. DISPOSAL CONSIDERATIONS

### 13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this MSDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

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### 14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

#### US DOT

Dangerous Goods? X

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Hazard Class: 9

Packing Group: III

UN/ID Number: UN3082

Transport Label Required: Miscellaneous  
Marine Pollutant

Marine Pollutant

Technical Name (N.O.S.): Tripropylene glycol diacrylate

Comments: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars or aircraft.

#### TRANSPORT CANADA

Dangerous Goods? X

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Hazard Class: 9

Packing Group: III

UN Number: UN3082

Transport Label Required: Miscellaneous  
Marine Pollutant

Marine Pollutant

Technical Name (N.O.S.): Tripropylene glycol diacrylate

#### ICAO / IATA

Dangerous Goods? X

UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Transport Hazard Class: 9

Packing Group: III

UN Number: UN3082

Transport Label Required: Miscellaneous

Technical Name (N.O.S.): Tripropylene glycol diacrylate

## IMO

Dangerous Goods? X

UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.

Transport Hazard Class: 9

UN Number: UN3082

Packing Group: III

Transport Label Required: Miscellaneous  
Marine Pollutant

Marine Pollutant

Technical Name (N.O.S.): Tripropylene glycol diacrylate

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## 15. REGULATORY INFORMATION

### Inventory Information

**United States (USA):** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**Canada:** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**European Economic Area (including EU):** When purchased from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, pre-registered and/or registered.

**Australia:** All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

**Korea:** All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

### OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

This product does not contain any components regulated under these sections of the EPA

### PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute
- Reactivity

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## 16. OTHER INFORMATION

### NFPA Hazard Rating (National Fire Protection Association)

Health: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 1 - Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures.

**Reasons For Issue:** Company address changed

**Date Prepared:** 01/31/2014

**Date of last significant revision:** 06/01/2013

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Prepared By: Product Stewardship & Regulatory Affairs Department, <http://www.allnex.com/contact>

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