

**SDS**: 0038399

**Date Prepared: 01/08/2018** 

## **SAFETY DATA SHEET**

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## 1. IDENTIFICATION

Product Name: EBECRYL® 8701 radiation curing resins

Synonyms: None

Product Description: Acrylated oligomer

Molecular Formula: Mixture Molecular Weight: Mixture

Intended/Recommended Use: Surface coating

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:**

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## 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Reproductive Toxicant Hazard Category 1B Skin Corrosion / Irritation Hazard Category 2 Serious Eye Damage / Eye Irritation Hazard Category 2A

#### **LABEL ELEMENTS**



## Signal Word DANGER

#### **Hazard Statements**

May damage fertility or the unborn child Causes skin irritation Causes serious eye irritation

## **Precautionary Statements**

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash face, hands and any exposed skin thoroughly after handling.

IF exposed or concerned: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

Specific treatment (see supplemental first aid instructions on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local and national regulations.

#### Hazards Not Otherwise Classified (HNOC), Other Hazards

Polymerization may occur from excessive heat, contamination or exposure to direct sunlight. Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylates.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

## **HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification	Carcinogen
Dibutyltin dilaurate	< 0.15	Muta. 2 (H341)	-
77-58-7		Repr. 1B (H360FD)	
		STOT RE 1 (H372)	
		STOT Single 1 (H370)	
		Skin Corr. 1C (H314)	
		Eye Dam. 1 (H318)	
		Skin Sens. 1B (H317)	
		Aquatic Acute 1 (H400)	
		Aquatic Chronic 1 (H410)	
Acrylated resin	95 - 100	Skin Irrit. 2 (H315)	-
-		Eye Irrit. 2A (H319)	

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

## 4. FIRST AID MEASURES

#### **First-aid Measures**

#### Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Apply artificial respiration if patient is not breathing. 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.

## **Eye Contact:**

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

#### 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.

#### Most Important Symptoms and Effects, Acute and Delayed

None known

## **Immediate Medical Attention and Special Treatment**

Not applicable

## **Notes To Physician:**

No specific measures have been identified.

#### 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media:**

Use water spray or fog, carbon dioxide or dry chemical.

#### **Protective Equipment:**

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

## **Special Hazards:**

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

#### 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:**

None known

#### References to other sections:

See Sections 7, 8 and 13 for additional information.

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#### 7. HANDLING AND STORAGE

#### **HANDLING**

**Precautions:** Wash hands thoroughly after handling. Wear protective gloves and eye/face protection.

**Special Handling Statements:** Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid excessive heat, contamination or exposure to direct sunlight to prevent polymerization.

#### **STORAGE**

Store in a cool, dry, well ventilated place and keep container tightly closed. Keep away from heat sources and direct sunlight.

Storage Temperature: Store at 4 - 40 °C 39.2 - 104 °F

Reason: Quality.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Engineering Measures:**

Utilize a closed system process where feasible. 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 particle Type P2 filter

#### **Eye Protection:**

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

#### **Skin Protection:**

Prevent contamination of skin or clothing when removing protective equipment. Barrier creams may be used in conjunction with the gloves to provide additional skin protection. Wear impermeable gloves and suitable protective clothing.

#### **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 - non exhaustive list:

Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: up to 480 min

Gloves for short term exposure/splash protection - non exhaustive list:

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 - non exhaustive list:

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.

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#### **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.

**Exposure Limit(s)** 

77-58-7 Dibutyltin dilaurate

OSHA (PEL): 0.1 mg/m $^3$  (TWA) ACGIH (TLV): 0.2 mg/m $^3$  Sn (STEL)

(skin)

0.1 mg/m³ Sn (TWA)
Other Value: Not established

**Biological Exposure Limit(s)** 

No values have been established.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: clear to hazy light yellow

Appearance: waxy solid Odor: acrylate

Boiling Point: Not applicable Melting Point: Not applicable

Vapor Pressure: 0.013 hPa @ 20 °C

Specific Gravity/Density:

Vapor Density:

Percent Volatile (% by wt.):

pH:

Saturation In Air (% By Vol.):

1.1 g/cm³

Not applicable

Not applicable

Not applicable

Not applicable

Evaporation Rate:
Solubility In Water:
Volatile Organic Content:
Not applicable slightly soluble
Not applicable

Flash Point: 174 °C 345.2 °F Setaflash Closed Cup

Flammable Limits (% By Vol): Not applicable
Autoignition Temperature: Not applicable
Partition coefficient Not available

(n-octanol/water):

Odor Threshold: Not available

Viscosity (Kinematic): Not applicable

Viscosity (Dynamic): 3000 - 5800 mPa.s @ 60 °C

## 10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable

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**Conditions To Avoid:** Avoid direct exposure to sunlight. Loss of dissolved air. Loss of polymerization

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inhibitor.

Polymerization: May occur

Conditions To Avoid: Hazardous polymerization can occur when exposed to direct sunlight. Hazardous

exothermic polymerization can occur when heated. Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers Material should not be

heated above 100°C due to polymerization.

Materials To Avoid: Peroxides, free radical initiators, strong alkalis

Copper, copper alloys, carbon steel, iron and rust.

Hazardous polymerization may occur.

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 Decomposition** 

**Products:** 

nitrogen oxides (NOx)

oxides of carbon hydrocarbons

smoke

soot

## 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Oral.

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification

criteria are not met.

Acute toxicity - dermal: Not Classified - Based on available data and/or professional judgment, the

classification criteria are not met.

Acute toxicity - inhalation: Not Classified - Based on available data and/or professional judgment, the

classification criteria are not met.

Skin corrosion / irritation: Causes skin irritation

Serious eye damage / eye irritation: Causes serious eye irritation

Respiratory sensitization: Not Classified - Based on available data and/or professional judgment, the

classification criteria are not met.

Skin sensitization: Not Classified - Based on available data and/or professional judgment, the classification

criteria are not met.

Carcinogenicity: Not Classified - Based on available data and/or professional judgment, the classification

criteria are not met.

Germ cell mutagenicity: Not Classified - Based on available data and/or professional judgment, the

classification criteria are not met.

Reproductive toxicity: May damage fertility or the unborn child

**Specific target organ toxicity (STOT) - single exposure:** Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure:** Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

Aspiration hazard: Not Classified - Based on physical form, not an expected route of exposure.

**ACUTE TOXICITY DATA** 

oral rat Acute LD50 > 2000 mg/kg
dermal rabbit Acute LD50 > 2000 mg/kg

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inhalation rat Acute LC50 4 hr No data

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation dermal Irritating
Acute Irritation eye Irritating

**ALLERGIC SENSITIZATION** 

Sensitization Skin No data Sensitization respiratory No data

**GENOTOXICITY** 

**Assays for Gene Mutations** 

Ames Salmonella Assay No data

#### OTHER INFORMATION

The product toxicity information above has been estimated.

The toxicological properties of this material have not been fully determined.

Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms such as redness, blistering, dermatitis, etc.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylates.

#### HAZARDOUS INGREDIENT TOXICITY DATA

Based on literature and actual test data, dibutyltin dilaurate (DBTL) has acute oral LD50 values ranging from less than 2000 to >2000 mg/kg. The acute dermal LD50 (rat) is >2000 mg/kg. Dibutyltin dilaurate (DBTL) may cause severe eye and skin irritation and/or burns and respiratory tract irritation. This substance may cause skin sensitization (allergic skin reactions). Repeated oral administration of DBTL has caused liver damage and death in animals. Neurotoxicity has also been observed in animals after oral exposure. DBTL may impair fertility, may cause harm to the unborn child and is suspected of causing genetic defects.

The toxicological properties of acrylated resin have not been fully investigated. Direct contact with this material may cause moderate eye and skin irritation.

## 12. ECOLOGICAL INFORMATION

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

The ecological properties of this material have not been fully investigated.

## **RESULTS OF PBT AND VPVB ASSESSMENT**

Not determined

#### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Dibutyltin dilaurate (77-58-7)	LC50 = 2 mg/L - Oryzias latipes (48h)
Acrylated resin (-)	Not available

Component / CAS No.	Toxicity to Water Flea
Dibutyltin dilaurate (77-58-7)	Not available
Acrylated resin (-)	Not available

Component / CAS No.	Toxicity to Algae
Dibutyltin dilaurate (77-58-7)	Not available
Acrylated resin (-)	Not available

Component / CAS No.	Partition coefficient
Dibutyltin dilaurate (77-58-7)	Not available
Acrylated resin (-)	Not available

## 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 seg) 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 SDS 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 SDS (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.

## 14. TRANSPORT INFORMATION

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

#### **US DOT**

Dangerous Goods? Not applicable/Not regulated

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#### TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

#### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

#### **IMO**

Dangerous Goods? Not applicable/Not regulated

#### 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.

**Australia:** One or more components of this product have NOT yet been included in the Australian Inventory of Chemical Substances (AICS) or assessed by NICNAS.

**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.

**Philippines:** All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

**Taiwan:** All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

#### 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 CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

#### **Physical Hazards**

Not applicable

## **Health Hazards**

Reproductive toxicity
Skin Corrosion or Irritation
Serious eye damage or eye irritation

#### 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: Revised Section 15

Date Prepared: 01/08/2018 Date of last significant revision: 11/27/2012

#### **Component - Hazard Statements**

Dibutyltin dilaurate

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H341 - Suspected of causing genetic defects.

H360FD - May damage fertility. May damage the unborn child.

H370 - Causes damage to organs.

H372 - Causes damage to organs through prolonged or repeated exposure.

H400 - Very toxic to aquatic life.

H410 - Very toxic to aquatic life with long lasting effects.

Acrylated resin

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

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

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