

## SAFETY DATA SHEET

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### 1. IDENTIFICATION

**Product Name:** EBECRYL® 8606 radiation curing resins  
**Synonyms:** None  
**Product Description:** Acrylate modified polyurethane resin  
**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:**

+1-866-928-0789 (toll free) or +1-215-207-0061 (Carechem 24 - Allnex29003-NCEC)

See Section 16 for Emergency phone numbers for other regions.

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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute Toxicity (Inhalation) Hazard Category 4  
Skin Corrosion / Irritation Hazard Category 2  
Serious Eye Damage / Eye Irritation Hazard Category 2A  
Skin Sensitizer Hazard Category 1A  
Aquatic Environment Acute Hazard Category 3  
Aquatic Environment Chronic Hazard Category 3

#### LABEL ELEMENTS



#### Signal Word

WARNING

#### Hazard Statements

Harmful if inhaled  
Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction

Harmful to aquatic life  
Harmful to aquatic life with long lasting effects

### Precautionary Statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

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

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

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

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

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

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.

If skin irritation or rash occurs: Get medical advice/attention.

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.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification
Polyurethane resin -	79 - 85	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)
Acrylated urethane -	15 - 20	Acute Tox. 3 (H331) Skin Sens. 1A (H317) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)

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.

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## 4. FIRST AID MEASURES

### First-aid Measures

#### Inhalation:

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

#### Skin Contact:

Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

#### Eye Contact:

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

**Ingestion:**

Material is not expected to be harmful by ingestion. No specific first aid measures are required.

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

None known.

**Immediate Medical Attention and Special Treatment**

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

**Notes To Physician:**

No specific measures have been identified.

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## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:**

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

**Unsuitable Extinguishing Media:**

full water jet.

**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.

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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:**

Avoid release to the environment.

**References to other sections:**

See Sections 7, 8 and 13 for additional information.

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## 7. HANDLING AND STORAGE

**HANDLING**

**Precautions:** Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Avoid breathing vapors or spray mist. Wear protective gloves and eye/face protection.

**Special Handling Statements:** Avoid excessive heat, contamination or exposure to direct sunlight to prevent

polymerization. Provide good ventilation of working area (local exhaust ventilation if necessary).

## 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

**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 short term exposure/splash protection - non exhaustive list:

Laminated multilayer gloves, break through time: > 60 min

Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: < 60 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.

### Additional Advice:

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.

## Biological Exposure Limit(s)

No values have been established.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	clear to hazy, colorless to amber
<b>Appearance:</b>	liquid
<b>Odor:</b>	acrylate
<b>Boiling Point:</b>	> 100 °C
<b>Melting Point:</b>	> 30 - 40 °F Not available
<b>Vapor Pressure:</b>	< 0.13 mm Hg @ 20.00 °C
<b>Specific Gravity/Density:</b>	1.1 - 1.15 g/cm <sup>3</sup>
<b>Vapor Density:</b>	Not available
<b>Percent Volatile (% by wt.):</b>	< 0.5
<b>pH:</b>	Not applicable
<b>Saturation In Air (% By Vol.):</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Solubility In Water:</b>	0 - 1.5 g/L Minimal
<b>Volatile Organic Content:</b>	Not available
<b>Flash Point:</b>	154 °C 309 °F Cleveland Open Cup
<b>Flammable Limits (% By Vol):</b>	Not available
<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Greater than 150°C (302°F)
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Odor Threshold:</b>	Not available
<b>Viscosity (Kinematic):</b>	Not available
<b>Viscosity (Dynamic):</b>	6000 - 20000 cP @ 60 °C Very viscous liquid
<b>Flammability:</b>	Normal combustion
<b>Oxidizing Properties:</b>	No

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## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available
<b>Stability:</b>	Stable.
<b>Conditions To Avoid:</b>	Extreme heat, sparks, open flame, and oxidizers. Prevent loss of dissolved oxygen. Avoid excessive heat to closed containers. Stable under normal temperatures and pressure. Avoid direct exposure to sunlight. Excessively high temperatures and ignition sources.
<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 exothermic polymerization can occur when heated. Avoid contact with free radical initiators (peroxides, sulfides, or redox systems) and sunlight or ultraviolet light. Material should not be heated above 100°C due to polymerization.
<b>Materials To Avoid:</b>	Iron or rust may trigger rapid exothermic polymerization. Sunlight or ultraviolet light. Excessive heat Primary and secondary aliphatic amines.

Avoid sources of free radicals, peroxides and metal ions.  
Hazardous polymerization may occur.

**Hazardous Decomposition Products:** oxides of nitrogen  
hydrocarbons  
soot when burned  
Smoke, carbon monoxide and carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Oral, Eyes, Skin.

**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:** Harmful if inhaled

**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:** May cause an allergic skin reaction

**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:** Not Classified - Based on available data and/or professional judgment, the classification criteria are not met.

**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 available data and/or professional judgment, the classification criteria are not met.

## PRODUCT TOXICITY INFORMATION

### ACUTE TOXICITY DATA

oral	rat	Acute LD50	> 2000	mg/kg
dermal	rabbit	Acute LD50	> 2000	mg/kg
inhalation	rat	Acute LC50	4 hr	2 - 4 mg/l (Dust/Mist)

### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	dermal	Irritating
Acute Irritation	eye	Irritating

### ALLERGIC SENSITIZATION

Sensitization	Skin	Sensitizing
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.

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

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.

**HAZARDOUS INGREDIENT TOXICITY DATA**

Acrylated resin may cause moderate eye and skin irritation. Delayed removal from the skin, may lead to blistering of the skin, even if no immediate irritation was noted.

Acrylated urethane has an acute oral (rat) LD50 value > 2000 mg/kg. Upon inhalation (aerosol), 100% mortality rate was observed at 1 mg/L air. The LC50 value is estimated between 0.5 and 1 mg/L air. Irritation was not seen with in vitro assays, but severe allergic reactions can occur upon dermal exposure. Genotoxicity was observed in some in vitro assays. No target organ toxicity was identified in a subacute study combined with reprotox screening.

**12. ECOLOGICAL INFORMATION****TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS**

**Overall Environmental Toxicity:** Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

The ecological assessment for this material is based on an evaluation of its components.

**RESULTS OF PBT AND vPvB ASSESSMENT**

Not determined

**HAZARDOUS INGREDIENT TOXICITY DATA**

Component / CAS No.	Toxicity to Fish
Polyurethane resin (-)	Not available
Acrylated urethane (-)	Not available

Component / CAS No.	Toxicity to Water Flea
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Polyurethane resin (-)	Not available
Acrylated urethane (-)	Not available

Component / CAS No.	Toxicity to Algae
Polyurethane resin (-)	Not available
Acrylated urethane (-)	Not available

Component / CAS No.	Partition coefficient
Polyurethane resin (-)	Not available
Acrylated urethane (-)	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 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 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

#### TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

#### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

#### IMO

Dangerous Goods? Not applicable/Not regulated



**SPECIAL PRECAUTIONS FOR USER**

Protect against external heat sources above +40°C/104°F.

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**15. REGULATORY INFORMATION****Inventory Information**

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

**Canada:** One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

**European Economic Area (including EU):** When purchased and shipped 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 and/or registered.

**Australia:** One or more components of this product have NOT yet been included in the Australian Inventory of Industrial Chemicals (AIIC) or assessed by AICIS.

**China:** One or more components of this product are NOT included on the Chinese (IECSC) inventory. The company has obtained the required notification approvals from the Ministry of Environmental Protection (MEP) as per the "Environmental Administrative Measures for New Chemical Substance" for the component(s) not listed in the Chinese Inventory (IECSC). The product can be imported/manufactured in China ONLY under specific conditions.

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

**Korea:** One or more components of this product are NOT included on the Korean (ECL) inventory. The company has obtained the required notification approvals from Ministry of Environment (MOE) as per the ARECs (the Act on the Registration and Evaluation, etc. of Chemical Substances) for the component(s) not listed in the Korean Inventory (ECL). The product can be imported/manufactured in Korea ONLY under specific conditions. When purchased from Allnex Korea or Chemart distributor this product is compliant with the ARECs. All its components are either excluded, exempt, pre-notified and/or registered. When purchased from another allnex entity, please contact PSRA-KREACH@allnex.com to check the possibility to be covered by our Only Representative.

**Philippines:** All components of this product are either listed on the Philippine (PICCS) inventory, have been assessed by Environmental Management Bureau (EMB) or are exempt from notification requirements.

**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**

Acute toxicity (any route of exposure)  
Skin Corrosion or Irritation

Respiratory or Skin Sensitization  
Serious eye damage or eye irritation

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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:** Revised Section 1  
Revised Section 3

**Date Prepared:** 04/01/2021

**Date of last significant revision:** 04/01/2021

Polyurethane resin

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Acrylated urethane

H331 - Toxic if inhaled.

H317 - May cause an allergic skin reaction.

H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

### Emergency phone numbers for other regions

#### Asia Pacific

Australia: +61 1800 022 037 (Allnex Australia)

China (PRC): +86(0)532 8388 9090 (NRCC)

India: 000 800 100 7479 (toll free) or +65 3158 1198 (Carechem 24)

Indonesia: 007 803 011 0293 (Carechem 24)

Japan: +81 345 789 341 (Carechem 24)

Korea: +82 2 3479 8401 (Carechem 24)

Malaysia: +60 3 6207 4347 (Carechem 24)

New Zealand: +64 0800 803 002 (Allnex New Zealand)

Philippines: +63 2 231 2149 (Carechem 24)

Taiwan: +886 2 8793 3212 (Carechem 24)

Vietnam: +84 8 4458 2388 (Carechem 24)

All Others: +65 3158 1074 (Carechem 24)

#### Europe

+44 (0) 1235 239 670 (Carechem 24)

#### Middle East, Africa

+44 (0) 1235 239 671 (Carechem 24)

#### Latin America

Brazil: +55-800-707-7022 (toll free) or +55-11-98149-0850 (Suatrans 24)

Chile: +56 2 2582 9336 (Carechem 24)

Mexico and all others: +52-555-004-8763 (Carechem 24)

inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.

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