

**SDS:** 0037687 **Date Prepared:** 07/15/2014

# SAFETY DATA SHEET

### **1. IDENTIFICATION**

Product Name:EBECRYL® 8808 radiation curing resinsSynonyms:NoneProduct Description:Urethane acrylate oligomerMolecular Formula:MixtureMolecular Weight:MixtureIntended/Recommended Use:Coatings and Inks

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

Indicates trademark registered in the U.S. Outside the U.S., mark may be registered, pending or a trademark. Mark
 is or may be used under license.

# 2. HAZARDS IDENTIFICATION

**GHS Classification** Serious Eye Damage / Eye Irritation Hazard Category 2A Skin Sensitizer Hazard Category 1B

LABEL ELEMENTS



#### **Hazard Statements**

Causes serious eye irritation May cause an allergic skin reaction

#### **Precautionary Statements**

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Contaminated work clothing should not be allowed out of the workplace.
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 ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
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.

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification	Carcinogen
2-Hydroxyethylacrylate	0.2 - < 2.0	Acute Tox. 4 (H302)	-
818-61-1		Acute Tox. 3 (H311)	
		Skin Corr. 1B (H314)	
		Eye Dam. 1 (H318)	
		Skin Sens. 1B (H317)	
		Aquatic Acute 1 (H400)	
		Aquatic Chronic 3 (H412)	
Acrylated resin	> 98	Skin Irrit. 3 (H316)	-
-		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

#### DESCRIPTION OF FIRST AID MEASURES

#### **Eye Contact:**

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

Date Prepared: 07/15/2014

#### **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:

Material is not expected to be harmful if inhaled. Remove to fresh air.

#### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

#### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

#### **General Information:**

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

### **5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media:

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

#### **Extinguishing Media to Avoid:**

full 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.

### 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.

#### References to other sections:

See Sections 8 and 13 for additional information.

### 7. HANDLING AND STORAGE

#### HANDLING

**Precautions:** Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and eye/face protection.

#### Special Handling Statements: None

#### STORAGE

Observe label precautions. Prevent unauthorised access. Keep away from sources of ignition. Keep away from oxidizing agents, from alkaline and acid materials. Containers which are opened must be carefully resealed and kept upright to prevent leakage. This material should not be stored for more than the period mentioned on the Technical Data Sheet (TDS). Store between 4°C and 40°C. Protect from direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat. Storage in stainless steel, amber glass, amber polyethylene or baked phenolic lined container.

**Storage Temperature:** Store at 4 - 40 °C **Reason:** Quality.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Engineering Measures:**

Engineering controls are not usually necessary if good hygiene practices are followed.

#### **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.

#### 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:

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:

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.

Exposure Limit(s)

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Appearance: Odor: Boiling Point: Melting Point: Vapor Pressure: Specific Gravity/Density: Vapor Density: Percent Volatile (% by wt.): pH: Saturation In Air (% By Vol.): Evaporation Rate: Solubility In Water: Volatile Organic Content: Flash Point: Flammable Limits (% By Vol): Autoignition Temperature: Decomposition Temperature: Partition coefficient (n-octanol/water): Odor Threshold:	clear colorless to light straw clear viscous liquid acrylate > 100 °C Not available < 0.01 hPa @ 20 °C 1.1 - 1.2 g/cm <sup>3</sup> Not available < 0.5 % Not available Not available Insoluble Not available > 100 °C 212 °F Setaflash Closed Cup Not available Not available Not available Not available Not available
Odor Threshold: Viscosity (Kinematic):	Not available Not available

# **10. STABILITY AND REACTIVITY**

Stability:	Stable
Conditions To Avoid:	Avoid direct exposure to sunlight. Avoid temperatures higher than 60°C. Avoid friction with temperature increase as result. Avoid exposure to strong UV sources. Loss of dissolved air. Loss of polymerization inhibitor. Avoid direct contact with heat sources. Protect from direct sunlight.
Polymerization:	May occur
Materials To Avoid:	Avoid contact with peroxides. Free radical initiators. Avoid contact with reactive metals. Contact with alkalis. They give an exothermic reaction with the product. Unintentional contact with them should be avoided. 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:	Hazardous polymerization can occur when exposed to direct sunlight. Hazardous exothermic polymerization can occur when heated. oxides of carbon hydrocarbons Nitrous oxides (NOx)

# **11. TOXICOLOGICAL INFORMATION**

### PRODUCT TOXICITY INFORMATION

Likely Routes of Exposure: Eyes, Skin, Oral.

ACUTE TOXICITY DATA oral dermal inhalation	rat rabbit rat	Acute LD50 Acute LD50 Acute LC50 4 hr	> 2000 mg/kg No data > 5 mg/l
LOCAL EFFECTS ON SKIN AND EYE Acute Irritation Acute Irritation	eye dermal	Irritating Not irritating	
ALLERGIC SENSITIZATION Sensitization Sensitization	skin respiratory	Sensitizing No data	
CENIOTOVICITY			

#### 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.

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

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

#### HAZARDOUS INGREDIENT TOXICITY DATA

2-Hydroxyethyl acrylate has acute oral (rat) and dermal (rabbit/rat) LD50 values of 540 - 960 mg/kg and >1000 mg/kg, respectively. Direct skin contact with this material causes burns. Direct contact with eyes causes burns resulting in permanent damage. May cause allergic skin reactions. This material can be absorbed through the skin in harmful amounts. Inhalation exposure may cause irritation to the respiratory tract. Vapor may cause irritation to eyes. This substance was not mutagenic in the Ames Salmonella Assay. This material was mutagenic in various cell culture systems (i.e., Mouse Lymphoma Assay); however, these results could not be confirmed during in vivo tests in mammals. In long-term animal studies in which the substance was given by inhalation, a carcinogenic effect was not observed.

Acrylated resin has an acute oral (rat) and dermal toxicity (rabbit) LD50 values of >2000 mg/kg and > 2000 mg/kg, respectively. Contact may cause moderate eye and mild skin irritation, and may cause skin sensitization. The toxicological properties of this material have not been fully investigated

### **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 Algae	Toxicity to Fish	Toxicity to Water Flea
2-Hydroxyethylacrylate 818-61-1	Not available	LC50 = 4.8 mg/L - Pimephales promelas (96h)	EC50 = 0.78 mg/L - Daphnia magna (48h)
Acrylated resin -	Not available	Not available	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 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.

### **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

### **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:** 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 and ISHL) inventories or are not required to be listed on the Japanese inventories.

**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.

#### **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

### **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: New Format

Date Prepared:07/15/2014Date of last significant revision:07/15/2014

Page 9 of 9

#### **Component Hazard Phrases**

2-Hydroxyethylacrylate

H302 - Harmful if swallowed.

H311 - Toxic in contact with skin.

- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H400 - Very toxic to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

Acrylated resin

H319 - Causes serious eye irritation.

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

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, 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.