

**Date Prepared:** 06/01/2021

# **SAFETY DATA SHEET**

## 1. IDENTIFICATION

Product Name: EBECRYL® 3708 radiation curing resins

Synonyms: None

Product Description: (METH)ACRYLATED POLYESTER RESIN

**Molecular Formula:** Mixture **Molecular Weight:** Mixture

Intended/Recommended Use: Radiation curable coating ingredient, Coatings & 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:

+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**

Skin Corrosion / Irritation Hazard Category 2 Serious Eye Damage / Eye Irritation Hazard Category 2A Skin Sensitizer Hazard Category 1B Aquatic Environment Acute Hazard Category 3

## **LABEL ELEMENTS**



# Signal Word WARNING

#### **Hazard Statements**

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Harmful to aquatic life

# **Precautionary Statements**

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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.

Avoid release to the environment.

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.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification
2-Hydroxyethylacrylate	0.20 - 0.99	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)
Saturated polyester resin	97 - 99	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. Obtain medical advice if there are persistent symptoms.

#### **Skin Contact:**

Flush with a continuous flow of lukewarm water for 20 minutes or until material is removed. Wash with plenty of water and soap. Remove contaminated clothing and shoes without delay. Obtain medical attention if symptoms persist. 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

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anything by mouth to an unconscious person.

## 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.

## 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.

#### 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.

# 7. HANDLING AND STORAGE

#### **HANDLING**

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

**Special Handling Statements:** Use dry air to displace material removed from container. Avoid excessive heat, contamination or exposure to direct sunlight to prevent polymerization.

#### **STORAGE**

Keep away from sources of ignition - refrain from smoking. Keep away from heat sources and direct sunlight. Keep

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away from oxidizing agents, from alkaline and acid materials. Container which are opened must be carefully resealed and kept upright to prevent leakage. Prevent unauthorised access. Storage in stainless steel, amber glass, amber polyethylene or baked phenolic lined container.

Storage Temperature: Store at 4 - 40 °C 39 - 104 °F

Reason: Quality.

## 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 - 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.

### **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)**

No values have been established.

# **Biological Exposure Limit(s)**

No values have been established.

SDS: 0018291

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Color:** light green to light gray **Appearance:** clear to hazy liquid

Odor: acrylate

**Boiling Point:** > 100 °C 212 °F

Melting Point: Not available

Vapor Pressure: < 1.33 hPa @ 20 °C

Specific Gravity/Density: > 1.16 g/cm³
Vapor Density: 1.1 g/cm³
Percent Volatile (% by wt.): < 0.5 %

PH: Not available

Saturation In Air (% By Vol.):
Evaporation Rate:
Solubility In Water:
Volatile Organic Content:
Not available
Slightly soluble
Not available

Flash Point: Non Flammable (polymerized at 237 °C) Cleveland Open Cup

Flammable Limits (% By Vol):
Autoignition Temperature:
Decomposition Temperature:
Not available
Not available
Not available

(n-octanol/water):

Odor Threshold:
Viscosity (Kinematic):
Viscosity (Dynamic):

Flammability:

Not available
Not available
Low viscous liquid
Normal combustion

Oxidizing Properties: No

## 10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable.

Conditions To Avoid: Avoid exposure to direct sunlight. Avoid temperatures above 60°C (140°F). To

make the product pourable a short heating to max. 75°C (167°F) for 24hrs is

allowed.

Polymerization: May occur

Conditions To Avoid: Avoid contact with acids, oxidizing agents, free radical initiators, sunlight or

ultraviolet light, bases or amines. Material should not be heated above 100°C due

to polymerization.

Materials To Avoid: Peroxides, free radical initiators, strong alkalies.

reactive metals

**Hazardous Decomposition** 

**Products:** oxides of carbon

hydrogen chloride oxides of carbon hydrocarbons

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# 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Skin, Eyes, 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:** 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 No data Acute LD50 rat

rat

> 2000 dermal rat Acute LD50 mg/kg inhalation Acute LC50 4 hr No data

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation Irritating dermal 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 toxicity data above are the results from Allnex sponsored studies or from the available public literature.

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.

#### 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.

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



WARNING: Reproductive Harm – www.P65Warnings.ca.gov

## 12. ECOLOGICAL INFORMATION

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

Overall Environmental Toxicity: Harmful to aquatic life.

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
2-Hydroxyethylacrylate (818-61-1)	LC50 = 4.8 mg/L - Pimephales promelas - 96hrs
Saturated polyester resin (-)	Not available

Component / CAS No.	Toxicity to Water Flea
2-Hydroxyethylacrylate (818-61-1)	EC50 = 9.3 mg/L - Daphnia magna - 48hrs

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	NOEC = 0.86 mg/L - Daphnia magna - 21d
Saturated polyester resin (-)	Not available

Component / CAS No.	Toxicity to Algae
2-Hydroxyethylacrylate (818-61-1)	ErC50 = 6 mg/L - Pseudokirchnerella subcapitata -
	72hrs
	NOErC = 1 mg/L - Pseudokirchnerella subcapitata -
	72hrs
Saturated polyester resin (-)	Not available

Component / CAS No.	Partition coefficient
2-Hydroxyethylacrylate (818-61-1)	0.21
Saturated polyester 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 quidance 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

## 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 higher than +40°C/104°F.

# 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: 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 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:** All components of this product are either listed on the Australian Inventory of Industrial Chemicals, have been assessed by AICIS or are exempt from notification requirements

**New Zealand:** This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

**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. When purchased from Allnex Korea or Chemart distributor this product is compliant with the ARECs (the Act on the Registration and Evaluation, etc. of Chemical Substances). 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: One or more components of this product are NOT included on the Philippine (PICCS) 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).

**Switzerland:** All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 24-26).

# 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** 

Skin Corrosion or Irritation

Serious eye damage or eye irritation

Respiratory or Skin Sensitization

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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

**Date Prepared:** 06/01/2021 **Date of last significant revision:** 06/01/2021

# **Component - Hazard Statements**

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.

Saturated polyester resin

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

# **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)

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

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