

**SDS**: 0078520

**Date Prepared:** 08/22/2023

# **SAFETY DATA SHEET**

### 1. IDENTIFICATION

Product Name: EBECRYL® 9103 RADIATION CURING RESINS

Synonyms:NoneMolecular Formula:MixtureMolecular Weight:Mixture

Intended/Recommended Use: Formulation for coatings, Radiation curable coating ingredient

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.

Trademarks indicated with ®, TM or \* as well as the allnex name and logo are registered, unregistered or pending trademarks of Allnex Netherlands BV or its directly or indirectly affiliated allnex Group companies.

### 2. HAZARDS IDENTIFICATION

# **GHS Classification**

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

### **LABEL ELEMENTS**



### Signal Word WARNING

### **Hazard Statements**

Causes serious eye irritation
May cause an allergic skin reaction
Harmful to aquatic life
Toxic to aquatic life with long lasting effects

# **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.

Avoid release to the environment.

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

Not applicable

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

### **HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification
Methacrylate monomer	15 - 20	Eye Irrit. 2A (H319)
-		Skin Sens. 1 (H317)
Acrylate ester	75 - 85	Skin Sens. 1B (H317)
-		Aquatic acute 3 (H402)
		Aquatic chronic 2 (H411)

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:**

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.

#### **Eve 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.

# **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:** Avoid release to the environment. 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:** During processing and handling of the product, comply with the indicative occupational exposure limit values.

#### STORAGE

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

<

# 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.

SDS: 0078520

# **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. A full facepiece respirator also provides eye and face protection. Cutting, grinding or sanding of parts fabricated after curing may create respirable dust particles. Respiratory protection appropriate for this dust may be required. Refer to components listed above for potential hazardous components in the dust.

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.

#### Page 5 of 11

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid Odor: ester

Boiling Point: > 100 °C 212 °F

Melting Point: Not available

Vapor Pressure:< 1.33 hPa@ 20 °CSpecific Gravity/Density:1.17 g/cm³@ 25 °C

Vapor Density:
Percent Volatile (% by wt.):
pH:
Saturation In Air (% By Vol.):
Evaporation Rate:
Solubility In Water:
Volatile Organic Content:
Not available
Not available
Insoluble
Not available

Flash Point: 100 °C 212 °F Setaflash

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

n-octanol/water (log value):

Odor Threshold: Not available Viscosity (Kinematic): Not available

Viscosity (Dynamic): Highly viscous liquid Normal combustion Oxidizing Properties: Not available

# 10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable.

**Conditions To Avoid:** Avoid temperatures higher than 60°C. Avoid friction with temperature increase as

result. Avoid exposure to strong UV sources. Avoid direct contact with heat

sources. Protect from direct sunlight.

SDS: 0078520

Polymerization: Will not occur

Conditions To Avoid: None known

Materials To Avoid: Avoid contact with peroxides.

Avoid free radical producing initiators. Avoid contact with reactive metals.

Contact with alkalis.

They give an exothermic reaction with the product. Unintentional contact with them should be avoided.

**Hazardous Decomposition** 

Hazardous polymerization can occur when exposed to direct sunlight.

**Products:** Hazardous exothermic polymerization can occur when heated.

# 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.

SDS: 0078520

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

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

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	>	5 mg/l (Dust/Mist)

#### LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation Skin mild
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.

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

Methacrylate monomer has acute oral (rat) and dermal (rat) values of > 2000 mg/kg bw. Moderately irritating to eyes. Although irritation effects are very limited upon dermal exposure, the substance elicited dermal sensitization (guinea pigs). In a weight of evidence approach including both in vitro and in vivo studies, it was concluded that the substance doesn't have a genotoxic potential. Based on screening data on the substance itself and chronic data on metabolites, this substance is not expected to cause reproductive toxicity or developmental effects, nor target organ toxicity.

Epoxy acrylate has acute oral (rat) LD50 and acute dermal (rat) LD50 values of > 2000 mg/kg, respectively. This substance is not expected to cause eye or skin irritation but may cause skin (dermal) sensitization upon repeated exposures. No genotoxic potential was identified. Target organ toxicity was not observed in a sub chronic study. Reproductive performance was not affected and no developmental toxicity was seen on rat and rabbit studies. Carcinogenicity has not been investigated.



WARNING: Cancer and 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. Toxic 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
Methacrylate monomer (-)	Not available
Acrylate ester (-)	Not available

Component / CAS No.	Toxicity to Water Flea
Methacrylate monomer (-)	Not available
Acrylate ester (-)	Not available

Component / CAS No.	Toxicity to Algae
Methacrylate monomer (-)	Not available
Acrylate ester (-)	Not available

Component / CAS No.	Partition coefficient
Methacrylate monomer (-)	Not available
Acrylate ester (-)	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.

SDS: 0078520

# 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.): ACRYLATE ESTER

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.): Acrylate ester

### 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.): ACRYLATED ESTERS

### 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.): ACRYLATE MONOMER

### 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 included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

**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:** 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.

SDS: 0078520

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**

Respiratory or Skin Sensitization 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: New Product

Date Prepared: 08/22/2023 Date of last significant revision: 08/22/2023

### **Component - Hazard Statements**

Methacrylate monomer

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Acrylate ester

H317 - May cause an allergic skin reaction.

H402 - Harmful 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: 0120 015 230 (toll free) (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)

**Northern Asia** 

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

Europe

+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)

Prepared By: Product Sustainability & 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.

SDS: 0078520