

SDS: 0018278

**Date Prepared: 06/17/2015** 

# SAFETY DATA SHEET

# 1. IDENTIFICATION

Product Name: EBECRYL® 3700-25R radiation curing resins

Synonyms: None

Product Description: Mixture of acrylate resins

Molecular Formula: Mixture Molecular Weight: Mixture

Intended/Recommended Use: 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:

#### 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

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# 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Specific Target Organ Toxicity - Single Exposure Hazard Category 3 Skin Corrosion / Irritation Hazard Category 2 Serious Eye Damage / Eye Irritation Hazard Category 2A Skin Sensitizer Hazard Category 1B Aquatic Environment Acute Hazard Category 2 Aquatic Environment Chronic Hazard Category 2

### **LABEL ELEMENTS**



# Signal Word

Warning

#### **Hazard Statements**

May cause respiratory irritation Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction Toxic to aquatic life Toxic 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 all 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.

Store in a well-ventilated place. Keep container tightly closed.

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.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

# **HAZARDOUS INGREDIENTS**

Component / CAS No.	%	GHS Classification	Carcinogen
Bisphenol A diglycidyl ether di-acrylate (BADGE-DA) 55818-57-0	75 - 85	Skin Sens. 1B (H317)	<del>-</del>
Tripropylene glycol diacrylate 42978-66-5	20 - 30	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (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.

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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**

#### **Eve Contact:**

Rinse immediately with plenty of water for at least 15 minutes. 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.

#### 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:

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

#### 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:**

high pressure 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.

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# **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:**

Use appropriate containment to avoid environmental contamination. Avoid release to the environment.

# References to other sections:

See Sections 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. Use only outdoors or in a well-ventilated area. Avoid breathing vapors or spray mist. Wear protective gloves and eye/face protection.

Special Handling Statements: Product exposed to sunlight will slowly polymerize.

#### **STORAGE**

Store under air. The stabilizer is only effective in the presence of oxygen. Keep storage area well ventilated.

Storage Temperature: Store at 4 - 40 °C

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.

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# 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. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

#### 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Color:yellowishAppearance:liquidOdor:ester acrylateBoiling Point:> 100 °CMelting Point:Not available

Vapor Pressure: 0.013 hPa @ 20 °C

Specific Gravity/Density: 1.15 g/cm<sup>3</sup> Vapor Density: Not available Percent Volatile (% by wt.): Not available pH: Not available **Saturation In Air (% By Vol.):** Not available Not available **Evaporation Rate:** Solubility In Water: slightly soluble **Volatile Organic Content:** Not available

Flash Point: 185 °C Cleveland Open Cup

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

(n-octanol/water):

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

# 10. STABILITY AND REACTIVITY

Stability: Stable

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

Polymerization: May occur

**Conditions To Avoid:** 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 polymerization can occur when exposed to direct sunlight. Hazardous exothermic polymerization can occur when heated. Avoid contact with bases or amines. Avoid contact with strong oxidizing agents. Avoid contact with free radical

initiators.

Materials To Avoid: Avoid contact with peroxides.

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

Avoid free radical producing initiators.

Contact with alkalis.

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

Avoid contact with active metals. Hazardous polymerization may occur.

**Hazardous Decomposition** 

Products:

oxides of carbon

smoke

hydrocarbons

soot

# 11. TOXICOLOGICAL INFORMATION

# PRODUCT TOXICITY INFORMATION

Likely Routes of Exposure: Skin, Eyes, Oral, Respiratory System.

**ACUTE TOXICITY DATA** 

Acute LD50 oral > 2000 mg/kg rat 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 dermal rabbit Irritating Acute Irritation eye rabbit Irritating

**ALLERGIC SENSITIZATION** 

Sensitization dermal Sensitizing Sensitization inhalation No data

**GENOTOXICITY** 

**Assays for Gene Mutations** 

Negative Ames Salmonella Assav

SPECIFIC TARGET ORGAN TOXICITY

Specific target organ toxicity (single exposure): No data Specific target organ toxicity (repeated exposure): No data

#### OTHER INFORMATION

The product toxicity information above has been estimated.

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

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

Ingestion may cause nausea, weakness and central nervous system effects.

#### HAZARDOUS INGREDIENT TOXICITY DATA

Bisphenol A diglycidyl ether diacrylate has acute oral (rat) LD50 and acute dermal (rabbit) 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.

Tripropylene glycol diacrylate has acute oral (rat) LD50 and acute dermal (rabbit) LD50 values of 6800 mg/kg and >2000 mg/kg, respectively. Direct contact causes skin and eye irritation. Overexposure to vapor or mist may cause respiratory irritation. Repeated contact may cause skin sensitization (allergic skin reaction). This material was not clastogenic in an in vivo mouse micronucleus assay.

California Proposition 65 Warning (applicable in California only) - This product contains (a) chemical(s) known to the State of California to cause birth defects or other reproductive harm.

# 12. ECOLOGICAL INFORMATION

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

Overall Environmental Toxicity: Toxic to aquatic life with long lasting effects. Toxic 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 Algae	Toxicity to Fish	Toxicity to Water Flea
Bisphenol A diglycidyl ether di-acrylate (BADGE-DA) 55818-57-0	Not available	Not available	Not available
Tripropylene glycol diacrylate 42978-66-5	EC50 > 28 mg/L - Desmodesmus subspicatus (72h)	LC50 4.5 - 10 mg/L - Leuciscus idus (96h)	EC50 = 88.7 mg/L - Daphnia magna (48h)

# 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 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.

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# 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.): TRIPROPYLENE GLYCOL DIACRYLATE

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.): TRIPROPYLENE GLYCOL DIACRYLATE

#### 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.): TRIPROPYLENE GLYCOL DIACRYLATE

#### 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.): TRIPROPYLENE GLYCOL DIACRYLATE

# 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.

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

**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) 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 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: Revised Section 4

Revised Section 5 Revised Section 8 Revised Section 9

Date Prepared: 06/17/2015 Date of last significant revision: 06/17/2015

### **Component Hazard Phrases**

Bisphenol A diglycidyl ether di-acrylate (BADGE-DA)

H317 - May cause an allergic skin reaction.

Tripropylene glycol diacrylate

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

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

Date Prepared: 06/17/2015

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