

SDS: 0056662 **Date Prepared:** 09/07/2020

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name:ESynonyms:NProduct Description:MMolecular Weight:NIntended/Recommended Use:0

EBECRYL® 3721 radiation curing resins None Mixture of acrylated resin Not available 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:

+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 Sensitizer Hazard Category 1B Aquatic Environment Acute Hazard Category 3 Aquatic Environment Chronic Hazard Category 3

LABEL ELEMENTS



Signal Word WARNING

Hazard Statements

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. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

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
Bisphenol A diglycidyl ether di-acrylate	< 16	Skin Sens. 1B (H317)
(BADGE-DA)		Aquatic acute 3 (H402)
55818-57-0		Aquatic chronic 2 (H411)
hydroxypropyl acrylate, (mix)	1.3 - 2.2	Acute Tox. 3 (H301)
25584-83-2		Acute Tox. 3 (H311)
		Acute Tox. 3 (H331)
		Skin Corr. 1B (H314)
		Eye Dam. 1 (H318)
		Skin Sens. 1B (H317)
		Aquatic Acute 2 (H401)
		Aquatic Chronic 3 (H412)
Acrylated resin	75 - 85	Skin Sens. 1B (H317)
-		

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:

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.

Eye Contact:

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

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

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, high pressure 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: Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Avoid release to the environment.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid excessive heat, contamination or exposure to direct sunlight to prevent polymerization.

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 39.2 - 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.

<u>Gloves for repeated or prolonged exposure - non exhaustive list:</u> Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: up to 480 min

<u>Gloves for short term exposure/splash protection - non exhaustive list:</u> 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. 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.

Biological Exposure Limit(s)

No values have been established.

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:	clear to hazy light yellow liquid acrylate > 100 °C Not available 0.01 hPa @ 20 °C 1.14 g/cm ³ Not available < 0.5 Not available Not available Not available Slightly soluble Not available
Flash Point: Flammable Limits (% By Vol): Autoignition Temperature: Decomposition Temperature: Partition coefficient	 > 198 °C 388.4 °F Cleveland Open Cup Not applicable Not available Not available 3.57
(n-octanol/water): Odor Threshold: Viscosity (Kinematic): Viscosity (Dynamic): Explosive Properties: Oxidizing Properties:	Not available Not available 3000 - 5000 mPa.s @ 65.5 °C None. No

10. STABILITY AND REACTIVITY

Reactivity:	No information available	
Stability:	Stable.	
Conditions To Avoid:	Avoid direct exposure to sunlight. To make the product pourable a short heating to max. 75°C (167°F) for 24hrs is allowed. 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.	
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.	
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	l.
Hazardous polymerization may occur.	

Hazardous Decomposition Products: oxides of carbon smoke hydrocarbons soot

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

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

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	dermal
Acute Irritation	eye

No data No data

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ALLERGIC SENSITIZATION

Sensitization Sensitization Skin respiratory Sensitizing 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

Bisphenol A diglycidyl ether diacrylate 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.

Hydroxypropyl acrylate (mixture), CAS# 25584-83-2, has acute oral (rat) and acute dermal (rat) LD50 values of 1001 mg/kg and > 1000 mg/kg, respectively. Direct contact with this substance may cause serious irreversible damage (corrosive) to eyes and skin. Prolonged or repeated contact may cause skin sensitization or dermatitis. Genetic effects were observed in standard in vitro tests, but were not confirmed in the mouse micronucleus assay. Hydroxypropyl acrylate is not expected to cause teratogenic effects, not affect reproductive parameters. Based on a structural analogue, it's not expected to be carcinogenic.

Acrylated resin has acute oral (rat) LD50 and acute dermal (rat) LD50 values of > 2000 mg/kg. This substance is not expected to cause eye or skin irritation but was found to be a skin sensitizer in the mouse local lymph node assay. Based on the results of in vitro and in vivo testing of a similar substance, it is not considered to be genotoxic. No fertility or developmental effects were seen in reproductive toxicity studies (based on a similar substance).

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. 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
Bisphenol A diglycidyl ether di-acrylate	
(BADGE-DA) (55818-57-0)	96hrs
	NOEC = 0.25 mg/L (measured) - Pimephales
	promelas - 33d
hydroxypropyl acrylate, (mix)	LC50 = 3.61 mg/L - Pimephales promelas (96hrs)
(25584-83-2)	
Acrylated resin (-)	LC50 = >100 mg/l - Carp (Cyprinus carpio) (96h)

Component / CAS No.	Toxicity to Water Flea
Bisphenol A diglycidyl ether di-acrylate (BADGE-DA) (55818-57-0)	EC50 > 100 mg/L (nominal) - Daphnia magna - 48hrs
	NOEC > 0.51 mg/L (measured) - Daphnia magna -
	21d
hydroxypropyl acrylate, (mix)	EC50 = 24 mg/L - Daphnia magna (48hrs)
(25584-83-2)	NOEC = 10 mg/L - Daphnia magna (48hrs)
Acrylated resin (-)	EC50 = >100 mg/l - Daphnia magna (48h)

Component / CAS No.	Toxicity to Algae
Bisphenol A diglycidyl ether di-acrylate	EC50 = 105 mg/L (nominal) - Selenastrum
(BADGE-DA) (55818-57-0)	capricornutum - 72hrs
	EC50 = 17 mg/L (measured) - Selenastrum
	capricornutum - 72hrs
	EC10 = 29 mg/L (nominal) - Selenastrum
	capricornutum - 72hrs
	EC10 = 4.8 mg/L (measured) - Selenastrum
	capricornutum - 72hrs
hydroxypropyl acrylate, (mix)	EC50 = 6.98 mg/L - Pseudokirchnerella subcapitata
(25584-83-2)	(72hrs)
	NOEC = 0.625 mg/L - Pseudokirchnerella
	subcapitata (72hrs)
Acrylated resin (-)	EC50 = >100 mg/L - Pseudokirchneriella
	subcapitata (72h)

Component / CAS No.	Partition coefficient
Bisphenol A diglycidyl ether di-acrylate (BADGE-DA) (55818-57-0)	Not available
hydroxypropyl acrylate, (mix) (25584-83-2)	Not available
Acrylated 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 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

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 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. 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).

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 Respiratory or Skin Sensitization

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 2 Revised Section 3 Revised Section 12	
Date Prepared:	09/07/2020	

Date of last significant revision: 09/07/2020

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

H317 - May cause an allergic skin reaction.

H402 - Harmful to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

hydroxypropyl acrylate, (mix) H301 - Toxic if swallowed.

H311 - Toxic in contact with skin.

H314 - Causes severe skin burns and eve damage.

H317 - May cause an allergic skin reaction.

H331 - Toxic if inhaled.

H401 - Toxic to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

Acrylated resin

H317 - May cause an allergic skin reaction.

Emergency phone numbers for other regions

Asia Pacific

Australia: +61 1800 022 037 (Allnex Australia) China (PRC): +86(0)25 8547 7110 (Jiangsu registration center) / +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)

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

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