

SDS: 0057884

Date Prepared: 01/08/2018

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: EBECRYL® 4265 radiation curing resins

Synonyms: None

Product Description: unsaturated urethane acrylate resin

Molecular Weight: Not available Intended/Recommended Use: Surface coating

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:

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2. HAZARDS IDENTIFICATION

GHS Classification

Serious Eye Damage / Eye Irritation Hazard Category 2A

Aquatic Environment Acute Hazard Category 2

Aquatic Environment Chronic Hazard Category 2

LABEL ELEMENTS



Signal Word WARNING

Hazard Statements

Causes serious eye irritation
Toxic 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 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.

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
Acrylated resin	~100	Eye Irrit. 2A (H319)	-
-		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.

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:

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

Skin Contact:

Wash immediately with plenty of water and soap.

Eye Contact:

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

Ingestion:

Date Prepared: 01/08/2018

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, 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: Avoid release to the environment. Wash hands thoroughly after handling. Wear eye/face protection.

Special Handling Statements: Avoid excessive heat, contamination or exposure to direct sunlight to prevent polymerization.

STORAGE

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

Date Prepared: 01/08/2018

Storage Temperature: Store at 4 - 40 °C

Reason: Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

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:

Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:

Prevent contamination of skin or clothing when removing protective equipment. 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 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)

Page 5 of 10

SDS: 0057884

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: vellowish Appearance: liquid Odor: odorless

Boiling Point: > 100 °C 212 °F **Melting Point:** Not available

Vapor Pressure: < 110 hPa @ 50 °C EG A4 Specific Gravity/Density: ~ 1.12 g/cm³ DIN 51757 @ 20 °C

Vapor Density: Not available Not available Percent Volatile (% by wt.): :Ha Not available Saturation In Air (% By Vol.): Not available **Evaporation Rate:** Not available

@ 15 °C immiscible Solubility In Water:

Volatile Organic Content: Not available

> 100 °C 212 °F DIN EN ISO 2719 Flash Point:

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

(n-octanol/water):

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

Viscosity (Dynamic): ~ 800 mPa.s @ 23 °C DIN EN ISO 3219

10. STABILITY AND REACTIVITY

No information available Reactivity:

Stable Stability:

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.

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 Decomposition

oxides of carbon oxides of nitrogen **Products:**

estimated

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, 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: Causes serious eye irritation

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

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

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
			(estimated)
inhalation	rat	Acute LC50 4 hr	> 5 mg/l (Dust/Mist)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	dermal	rabbit	Slightly Irritating
Acute Irritation	eye	rabbit	Irritating

ALLERGIC SENSITIZATION

Sensitization	Skin	guinea pig	Not sensitizing
Sensitization	respiratory	No data	

Date Prepared: 01/08/2018

Assays for Gene Mutations

Ames Salmonella Assay Negative

HAZARDOUS INGREDIENT TOXICITY DATA

The acrylic resin has an acute oral LD50 (rat) of > 2000 mg/kg. Direct contact causes moderate eye irritation and may cause slight skin irritation (rabbits). The acrylic resin did not show a sensitizing effect on guinea-pig and was not mutagenic in the Ames test.

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. Toxic to aquatic life with long lasting effects.

ECOTOXICITY

FISH TEST RESULTS

Test: Acute toxicity, freshwater (OECD 203)

Duration: 96 hr.

Species: Zebra Fish (Brachydanio rerio)

7.7 mg/l LC50

BACTERIA TEST RESULTS

Test: Respiration Inhibition (OECD 209) **Species:** Activated Sludge - Bacterial

> 10.000 mg/l EC50

PERSISTENCE AND DEGRADABILITY

DEGRADATION

Test: Biodegradability Closed Bottle (OECD 301D)

Duration: 28 day

8 % This material is not readily biodegradable.

RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Component / CAS No.	I DXICILY LO FISII

Acrylated resin (-)	LC50 = 7.7 mg/L - Zebra Fish (Brachydanio rerio)
	(96h)

Component / CAS No.	Toxicity to Water Flea
Acrylated resin (-)	Not available

Component / CAS No.	Toxicity to Algae
Acrylated resin (-)	Not available

Component / CAS No.	Partition coefficient
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 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? 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.): ACRYLATED RESIN

Comments: Marine Pollutants - DOT requirements specific to Marine Pollutants do not apply to

non-bulk packagings transported by motor vehicles, rail cars or aircraft.

Page 9 of 10

Dangerous Goods? X

PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

SDS: 0057884

Hazard Class: 9 Packing Group: III UN Number: UN3082

Transport Label Required: Miscellaneous Marine Pollutant

Marine Pollutant

TECHNICAL NAME (N.O.S.): ACRYLATED RESIN

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 RESIN

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.): ACRYLATED RESIN

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: One or more components of this product have NOT yet been included in the Australian Inventory of Chemical Substances (AICS) or assessed by NICNAS.

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.

SDS: 0057884

Date Prepared: 01/08/2018

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: 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

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: Revised Section 15

Date Prepared: 01/08/2018 Date of last significant revision: 08/13/2015

Acrylated resin

H319 - Causes serious eye 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

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