

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: EBECRYL® 888 RADIATION CURING RESINS
Synonyms: None
Product Description: Acrylate modified polyurethane resin
Molecular Formula: Mixture
Molecular Weight: Mixture
Intended/Recommended Use: 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.

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

Reproductive Toxicant Hazard Category 2
Skin Corrosion / Irritation Hazard Category 2
Serious Eye Damage / Eye Irritation Hazard Category 1
Skin Sensitizer Hazard Category 1B
Aquatic Environment Acute Hazard Category 2
Aquatic Environment Chronic Hazard Category 2

LABEL ELEMENTS



Signal Word
DANGER

Hazard Statements

Suspected of damaging fertility or the unborn child
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Toxic to aquatic life
Toxic to aquatic life with long lasting effects

Precautionary Statements

Obtain special instructions before use.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash face, hands and any exposed skin thoroughly after handling.

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.

Immediately call a POISON CENTER or doctor/physician.

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
Triethylene glycol diacrylate 1680-21-3	0.5 - 1.5	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (H317)
Trimethylolpropane triacrylate 15625-89-5	0.5 - 1.5	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Toluene 108-88-3	< 0.3	Flam. Liq. 2 (H225) Repr. 2 (H361) STOT RE 2 (H373) STOT SE 3 (H336) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Asp. Tox. 1 (H304) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Unsaturated polyester resin -	20 - 30	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)
Polyurethane resin -	28 - 35	Eye Irrit. 2A (H319)
Acrylated polyether -	30 - 40	Eye Irrit. 2A (H319) Skin Sens. 1B (H317) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Acrylated esters -	8 - 10	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) 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.

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. Obtain medical attention immediately.

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.

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:

Use appropriate containment to avoid environmental contamination. 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. Avoid breathing vapors or spray mist. Wear protective gloves and eye/face protection.

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

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

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 short term exposure/splash protection - non exhaustive list:

Laminated multilayer gloves, break through time: > 60 min

Nitrile rubber (NBR), thickness: > 0.56 mm, break through time: < 60 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. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.

Exposure Limit(s)

108-88-3	Toluene	
OSHA (PEL):		200 ppm (TWA) 300 ppm (Ceiling)
ACGIH (TLV):		20 ppm (TWA)
Other Value:		Not established

Biological Exposure Limit(s)

Toluene 108-88-3	
Biological Exposure Indices (ACGIH)	0.02 mg/L (blood - prior to last shift of workweek) 0.03 mg/L (urine - end of shift) 0.3 mg/g creatinine (urine - end of shift)

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	colorless to yellow
Appearance:	liquid resin
Odor:	ester-like
Boiling Point:	> 100 °C 212 °F
Melting Point:	Not applicable
Vapor Pressure:	0.013 hPa @ 20 °C
Specific Gravity/Density:	1.0 - 1.2 g/cm ³
Vapor Density:	Not available
Percent Volatile (% by wt.):	0.1 - 0.3
pH:	Not applicable
Saturation In Air (% By Vol.):	Not applicable
Evaporation Rate:	Not applicable
Solubility In Water:	negligible
Volatile Organic Content:	Not available
Flash Point:	221 °C 430 °F Cleveland Open Cup
Flammable Limits (% By Vol):	Not available
Autoignition Temperature:	Not available
Decomposition Temperature:	Not available
Partition coefficient (n-octanol/water):	Not available
Odor Threshold:	Not available
Viscosity (Kinematic):	Not available
Viscosity (Dynamic):	~ 2,500 mPa.s @ 25 °C Viscous liquid
Flammability:	Not available
Oxidizing Properties:	No

10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable.

Conditions To Avoid: Avoid direct exposure to sunlight. Avoid temperatures above 40°C (104°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.
They give an exothermic reaction with the product.
Unintentional contact with them should be avoided.
Avoid contact with active metals.

Hazardous Decomposition Products: oxides of nitrogen
hydrocarbons
soot
Smoke, carbon monoxide and carbon dioxide.

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: Causes skin irritation

Serious eye damage / eye irritation: Causes serious eye damage

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: Suspected of damaging fertility or the unborn child

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	Irritating
Acute Irritation	eye	Causes serious damage

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

The toxicological properties of 2,2"-(ethylenedioxy) diethyl diacrylate (CAS 1680-21-3) have not been fully investigated. Irritating to eyes and skin. May cause sensitisation by skin contact.

Trimethylolpropane triacrylate has acute oral (rat) LD50 and acute dermal (rabbit) LD50 values of 3680 mg/kg and 5170 mg/kg, respectively. No mortality was observed in two inhalation studies. Direct contact with this material may cause eye and skin irritation. Repeated or prolonged skin contact may cause allergic skin reactions. Results of in vitro mutagenicity testing for trimethylolpropane triacrylate are mixed with both positive and negative findings.

Trimethylolpropane triacrylate may cause mutagenic effects based on in vitro studies. However, a more definitive in vivo study indicates trimethylolpropane triacrylate is not mutagenic (non-genotoxic). This was again confirmed in a COMET assay. In a long-term bioassay in which trimethylolpropane triacrylate was applied dermally to mice, trimethylolpropane triacrylate induced some tumour formation at the side of application only. These findings have been related to excessive local irritation, with no systemic carcinogenic potential. No developmental toxicity nor fertility impairment has been observed.

Toluene has acute oral (rat) and dermal (rabbit) LD50 values of 4,328 mg/kg and 12124 mg/kg, respectively. The acute 4-hour inhalation (rat, female) LC50 value is 5,060 ppm (19.07 mg/L). Toluene is a severe eye and moderate skin irritant. Inhalation overexposure to toluene vapor can cause headache, fatigue, nausea, and central nervous system depression. Sustained inhalation of high levels of toluene has been shown to cause reversible kidney and liver damage. Subchronic inhalation of toluene vapors have caused permanent hearing loss, decreased learning capabilities and damage to the eyes in laboratory animal tests. Deliberate inhalation of high concentrations of toluene

vapor by pregnant women has been shown to adversely affect the fetus. These fetotoxic effects include intrauterine growth retardation and delayed postnatal development. The fetotoxic effects of toluene seen in laboratory animals are similar to those seen in humans. Ingestion of toluene in laboratory animals caused mild gastritis and harmful effects on the respiratory system, kidneys, liver and heart. Ingestion in laboratory animals also caused harmful effects on the central nervous system and death. It has also been reported that subchronic ingestion of toluene caused brain and bladder damage in laboratory animals. Due to synergistic effects, the toxicity of toluene may be enhanced by exposure to n-hexane, benzene, xylene, acetylsalicylic acid and chlorinated hydrocarbons. The literature reports that toluene is an aspiration hazard, that acute oral exposure resulted in reversible visual dysfunction, and that chronic exposure has caused altered immune function in animals. Toluene is a chemical known to the State of California to cause reproductive toxicity.

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

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

Polyol acrylate has an acute dermal (rabbit) LD50 value of > 10000 mg/kg. Direct contact with this material may cause moderate eye irritation. Results from in vitro mutagenicity tests are mixed. This substance was not mutagenic in the Ames Salmonella Assay, however, it was mutagenic in various cell culture systems (i.e. Mouse lymphoma Assay). An in vivo mouse micronucleus study, designed to assess the clastogenic potential in whole animals, was negative for mutagenicity. Therefore, based on a weight-of-the-evidence approach, this material is considered non-mutagenic.

Acrylated esters has acute oral (rat) and dermal (rabbit) LD50 values of 540-1350 mg/kg and 4600 mg/kg, respectively. This material may cause moderate skin irritation and severe eye irritation. Acrylated esters may cause skin sensitization. This material was not mutagenic in the Ames Salmonella Assay and not mutagenic in the mammalian forward gene mutation test (HPRT). The outcome for chromosomal damage in the mouse Micronucleus Assay was also negative. A prenatal study in rabbits has not shown any adverse effects with regard to developmental toxicity. Carcinogenicity has not been investigated.

Carcinogenicity

This product contains one or more Carcinogen Chemical(s) in accordance with IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), ACGIH (American Conference of Governmental Industrial Hygienists).

Component / CAS No.	Carcinogen
Trimethylolpropane triacrylate 15625-89-5	IARC 2B



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: Toxic 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
Triethylene glycol diacrylate (1680-21-3)	Not available
Trimethylolpropane triacrylate (15625-89-5)	LC50 = 0.87 mg/L - Brachydanio rerio - 96hrs
Toluene (108-88-3)	LC50 = 5.5 mg/L - Oncorhynchus kisutch (96h) NOEC = 1.4 mg/L - Oncorhynchus kisutch (40d)
Unsaturated polyester resin (-)	Not available
Polyurethane resin (-)	Not available
Acrylated polyether (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Toxicity to Water Flea
Triethylene glycol diacrylate (1680-21-3)	Not available
Trimethylolpropane triacrylate (15625-89-5)	EC50 = 19.9 mg/L - Daphnia magna - 48hrs
Toluene (108-88-3)	EC50 = 3.78 mg/L - Ceriodaphnia dubia (48h) NOEC = 0.74 mg/L - Ceriodaphnia dubia(7d)
Unsaturated polyester resin (-)	Not available
Polyurethane resin (-)	Not available
Acrylated polyether (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Toxicity to Algae
Triethylene glycol diacrylate (1680-21-3)	Not available
Trimethylolpropane triacrylate (15625-89-5)	EC50 = 18.8 mg/L - Scenedesmus subspicatus - 72hrs EC10 = 1.9 mg/L - Scenedesmus subspicatus - 72hrs
Toluene (108-88-3)	EC50 = 134 mg/L - Chlorella vulgaris (3h) - reduced photosynthesis rate NOEC = 10 mg/L - Skeletonema costatum (72h)
Unsaturated polyester resin (-)	Not available
Polyurethane resin (-)	Not available
Acrylated polyether (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Partition coefficient
Triethylene glycol diacrylate (1680-21-3)	Not available
Trimethylolpropane triacrylate (15625-89-5)	Log Kow = 4.35
Toluene (108-88-3)	2.73
Unsaturated polyester resin (-)	Not available
Polyurethane resin (-)	Not available
Acrylated polyether (-)	Not available
Acrylated esters (-)	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? 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.): TRIMETHYLOLPROPANE TRIACRYLATE, ACRYLATED ESTERS

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.): TRIMETHYLOLPROPANE TRIACRYLATE, ACRYLATED ESTERS

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.): TRIMETHYLOLPROPANE TRIACRYLATE, 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.): TRIMETHYLOLPROPANE TRIACRYLATE, ACRYLATED ESTERS

SPECIAL PRECAUTIONS FOR USER

Protect against external heat sources above +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: One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

Australia: One or more components of this product have NOT yet been included in the Australian Inventory of Industrial Chemicals (AIIC) or assessed by AICIS.

China: One or more components of this product are NOT included on the Chinese (IECSC) inventory. The company has obtained the required notification approvals from the Ministry of Environmental Protection (MEP) as per the "Environmental Administrative Measures for New Chemical Substance" for the component(s) not listed in the Chinese Inventory (IECSC). The product can be imported/manufactured in China ONLY under specific conditions.

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: One or more components of this product are NOT included on the Korean (ECL) 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).

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

Reproductive toxicity
Skin Corrosion or Irritation
Respiratory or Skin Sensitization
Serious eye damage or eye irritation

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

Health: 3 - Materials that, under emergency conditions, can cause serious or permanent 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 11

Date Prepared: 11/25/2022

Date of last significant revision: 03/06/2022

Component - Hazard Statements

Triethylene glycol diacrylate

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.

Trimethylolpropane triacrylate

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Toluene

H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure.
H361d - Suspected of damaging the unborn child.
H401 - Toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Unsaturated polyester resin

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Polyurethane resin

H319 - Causes serious eye irritation.

Acrylated polyether

H319 - Causes serious eye irritation.
H317 - May cause an allergic skin reaction.
H401 - Toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Acrylated esters

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H317 - May cause an allergic skin reaction.
H401 - Toxic 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)

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 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.
