

Date Prepared: 06/21/2020

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: EBECRYL® 8213 radiation curing resin

Synonyms: None

Product Description: Polyurethane in organic solvent solution

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:

+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

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

LABEL ELEMENTS



Signal Word DANGER

Hazard Statements

Flammable liquid and vapor Suspected of damaging fertility or the unborn child May cause drowsiness or dizziness Causes serious eye damage

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May cause an allergic skin reaction

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Precautionary Statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Obtain special instructions before use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, dry chemical, or foam to extinguish.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

Specific treatment (see supplemental first aid instructions on this label).

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

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
2-Hydroxyethyl methacrylate 868-77-9	27 - 37	Eye Irrit. 2A (H319) Skin Sens. 1B (H317)
Butyl acetate 123-86-4	25 - 35	Flam. Liq. 3 (H226) STOT SE 3 (H336)
Toluene 108-88-3	< 0.35	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)
Acrylated resin -	10 - 18	Eye Irrit. 2A (H319)
Acrylated esters -	3 - 7	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. Apply artificial respiration if patient is not breathing. Obtain medical attention immediately.

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

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, alcohol foam, carbon dioxide or dry chemical to extinguish fires. Water stream may be ineffective.

Unsuitable Extinguishing Media:

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.

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:

Remove sources of ignition. 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: Keep away from heat, sparks and open flame. - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Use only outdoors or in a well-ventilated area. Avoid breathing vapors or spray mist.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values. Containers must be bonded and grounded when pouring or transferring material. 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. Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material`s flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed.

In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8 °C. Class II Combustible Liquids, 37.8 °C < Flashpoint <60 °C. Class IIIa Combustible Liquids, Flashpoint > 93 °C. Keep away from sources of ignition - refrain from smoking. Take precautionary measures against electrostatic loading - earthing necessary during loading operations. Observe the general rules of industrial fire protection.

Storage Temperature: Store at 4 - 40 °C 39 - 104 °F

Reason: Safety.

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:

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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:

Polyvinyl alcohol (PVA), thickness: 0.2-0.3 mm, break through time: > 480 min Polyethylene Nylon (PE), thickness: > 0.062 mm, break through time: > 480 min

Gloves for short term exposure/splash protection - non exhaustive list:

Nitrile rubber (NBR), thickness: 0.38 mm, break through time: up to 30 min

Butyl rubber (VB), thickness: 0.30 mm, break through time: up to 120 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:
Nitrile rubber (NBR), thickness: 0.12 mm
Natural rubber (NRL), thickness: 0.75 mm
Neoprene rubber (NE), thickness: 0.40 mm

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. 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)

123-86-4 Butyl acetate

OSHA (PEL): 150 ppm (TWA) 710 mg/m³ (TWA)

ACGIH (TLV): 150 ppm (STEL) 50 ppm (TWA)

Other Value: Not established

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)

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Biological Exposure Indices 0.02 mg/L (blood - prior to last shift of workweek)

(ACGIH) 0.03 mg/L (urine - end of shift)

0.3 mg/g creatinine (urine - end of shift)

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9. PHYSICAL AND CHEMICAL PROPERTIES

Color: yellowish Appearance: liquid

Odor: ester acrylate

126 °C 259 °F (value for butyl acetate) **Boiling Point:**

Melting Point: Not available **Vapor Pressure:** Not available **Specific Gravity/Density:** ~ 1.1 g/cm³ Vapor Density: Not available

Percent Volatile (% by wt.): ~ 25

Not available pH: Saturation In Air (% By Vol.): Not available **Evaporation Rate:** Not available Solubility In Water: Insoluble **Volatile Organic Content:** Not available

Flash Point: 39 °C 102 °F Setaflash Closed Cup

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

(n-octanol/water):

Not available **Odor Threshold:** Viscosity (Kinematic): Not available Viscosity (Dynamic): Not available Not available **Explosive Properties:**

Oxidizing Properties: Nο

10. STABILITY AND REACTIVITY

Reactivity: No information available

Stable. Stability:

Polymerization: May occur

Conditions To Avoid: Excessive heating of a confined mass may result in an uncontrolled exotherm with

the generation of smoke and toxic gases. Keep away from heat, spark, and flame.

Materials To Avoid: None known

Hazardous Decomposition Carbon dioxide

Products: Carbon monoxide (CO)

nitrogen oxides

11. TOXICOLOGICAL INFORMATION

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

Acute toxicity - oral: Not Classified - Based on available data and/or professional judgment, the classification

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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 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: May cause drowsiness or dizziness. May cause respiratory irritation.

Specific target organ toxicity (STOT) - repeated exposure: Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

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

PRODUCT TOXICITY INFORMATION

ACUTE TOXICITY DATA

oral	rat	Acute LD50	>	2000 mg/kg
dermal	rabbit	Acute LD50	>	2000 mg/kg
inhalation	rat	Acute LC50 4 hr	>	5 mg/l (Dust/Mist)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation Skin rabbit Irritating

Acute Irritation eye rabbit 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

Hydroxyethyl methacrylate (CAS # 868-77-9) has acute oral (rat) and dermal (rabbit) LD50 values of > 5000 mg/kg and > 3000 mg/kg, respectively. This material may cause moderate eye and mild skin irritation. Repeated skin contact with hydroxyethyl methacrylate may cause skin sensitization (guinea pig). Cases of sensitisation also observed in humans. No indications of teratogenic effects in experimental animals. The substance was not mutagenic in the Ames test.

Butyl acetate (CAS# 123-86-4) has acute oral (rat) and dermal (rabbit) LD50 values of 10,768 mg/kg and >17,600 mg/kg, respectively (RTECS). The acute 4-hr inhalation (rat) LC50 = >2000 ppm (9.5 mg/L)(NTP). Direct contact with this material may cause moderate eye and skin irritation. In humans, exposure concentrations of 200-300 ppm resulted in slight eye and nose irritation while short exposure to 3300 ppm caused extreme irritation of the eyes and nose (HSDB). Overexposure to solvent vapors may cause irritation of the eyes, nose, and throat. Severe inhalation overexposure may cause weakness, drowsiness, and unconsciousness. Prolonged dermal exposure may produce irritation of the skin. This material did not cause mutagenic activity when tested in the bacterial mutagenicity assay. When tested for reproductive effects in rats, fetotoxicity (stunted growth) and abnormalities of the musculoskeletal system was noted at an exposure concentration of 1500 ppm/7h/day during days 7-16 of pregnancy (HSDB).

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, fatique, 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 toxicity properties of acrylated resin have not been fully studied. Direct contact with this material may cause moderate eye irritation.

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.

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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.

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RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
2-Hydroxyethyl methacrylate (868-77-9)	LC50 213 - 242 mg/L - Pimephales promelas (96h)
	LC50 = 227 mg/L - Pimephales promelas (96h)
Butyl acetate (123-86-4)	LC50 17 - 19 mg/L - Pimephales promelas (96h) LC50 = 100 mg/L - Lepomis macrochirus (96h) LC50 = 62 mg/L - Leuciscus idus (96h)
Toluene (108-88-3)	LC50 = 5.5 mg/L - Oncorhynchus kisutch (96h) NOEC = 1.4 mg/L - Oncorhynchus kisutch (40d)
Acrylated resin (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Toxicity to Water Flea
2-Hydroxyethyl methacrylate (868-77-9)	Not available
Butyl acetate (123-86-4)	EC50 = 72.8 mg/L - Daphnia magna (24h)
Toluene (108-88-3)	EC50 = 3.78 mg/L - Ceriodaphnia dubia (48h) NOEC = 0.74 mg/L - Ceriodaphnia dubia(7d)
Acrylated resin (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Toxicity to Algae
2-Hydroxyethyl methacrylate (868-77-9)	Not available
Butyl acetate (123-86-4)	EC50 = 674.7 mg/L - Desmodesmus subspicatus (72h)
Toluene (108-88-3)	EC50 = 134 mg/L - Chlorella vulgaris (3h) - reduced photosynthesis rate NOEC = 10 mg/L - Skeletonema costatum (72h)
Acrylated resin (-)	Not available
Acrylated esters (-)	Not available

Component / CAS No.	Partition coefficient
2-Hydroxyethyl methacrylate (868-77-9)	0.47
Butyl acetate (123-86-4)	1.81
Toluene (108-88-3)	2.7
Acrylated resin (-)	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 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: RESIN SOLUTION

Hazard Class: 3
Packing Group: III
UN/ID Number: UN1866

Transport Label Required: Flammable Liquid

Component / CAS No. Hazardous Substances/Reportable Quantity of

Product (lbs)

Butyl acetate 16908

Comments: Flammable liquids with a flash point at or above 38° C (100° F) and not meeting

the definition of any other hazard class may be reclassed as a Combustible liquid except for transport by vessel or aircraft. If reclassed, these Combustible liquids

are not regulated in non-bulk packagings.

Hazardous Substances/Reportable Quantities - DOT requirements specific to Hazardous Substances only apply if the quantity in one package equals or

exceeds the product reportable quantity.

TRANSPORT CANADA

Dangerous Goods? X

PROPER SHIPPING NAME: RESIN SOLUTION

Hazard Class: 3 Packing Group: III UN Number: UN1866

Transport Label Required: Flammable Liquid

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Dangerous Goods? X

UN PROPER SHIPPING NAME: RESIN SOLUTION

Transport Hazard Class: 3 Packing Group: III UN Number: UN1866

Transport Label Required: Flammable Liquid

IMO

Dangerous Goods? X

UN PROPER SHIPPING NAME: RESIN SOLUTION

Transport Hazard Class: 3 UN Number: UN1866 Packing Group: III

Transport Label Required: Flammable Liquid

SPECIAL PRECAUTIONS FOR USER

Protect against external heat sources higher than +40°C/104°F.

15. REGULATORY INFORMATION

Inventory Information

United States (USA): All components of this product are designated as "Active" on the TSCA Inventory or are not required to be listed.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): When purchased and shipped from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt and/or registered.

Australia: All components of this product are included in the Australian Inventory of 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. 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

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CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.%TPQ (lbs)RQ(lbs)S313TSCA 12BButyl acetate25 - 35None5000NoNo

123-86-4

PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

Physical Hazards

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Reproductive toxicity

Respiratory or Skin Sensitization

Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)

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

Fire: 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions.

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

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Component - Hazard Statements

2-Hydroxyethyl methacrylate

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Butyl acetate

H226 - Flammable liquid and vapor.

H336 - May cause drowsiness or dizziness.

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.

Acrylated resin

H319 - Causes serious eye irritation.

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.

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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)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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