

**SDS**: 0039336

**Date Prepared: 01/08/2018** 

# **SAFETY DATA SHEET**

\_\_\_\_\_

## 1. IDENTIFICATION

Product Name: EBECRYL® LEO 10552 radiation curing resin

Synonyms: None

**Product Description:** Acrylated resin

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

## **Asia Pacific:**

Australia: +61 2801 44558 (Carechem 24) China (PRC): +86(0)532-8388-9090 (NRCC) Japan: +81 345 789 341 (Carechem 24) New Zealand: +64 9929 1483 (Carechem 24)

India: 000 800 100 7479 (toll free) or +65 3158 1198 (Carechem 24)

Korea: +82 2 3479 8401 (Carechem 24) Malaysia: +60 3 6207 4347 (Carechem 24) Philippines: +63 2 231 2149 (Carechem 24) All Others: +65 3158 1074 (Carechem 24) Europe/Africa/Middle East (Carechem 24):

Europe, Middle East, Africa, Israel: +44 (0) 1235 239 670

Middle East, Africa (Arabic speaking countries): +44 (0) 1235 239 671

Latin America:

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)

Canada and USA (Carechem 24 - Allnex29003-NCEC): +1-866-928-0789 (toll free) or +1-215-207-0061

Trademarks indicated with the ® or ™ are registered, unregistered or pending trademarks of Allnex IP S.à.r.l. or its directly or indirectly affiliated Allnex Group companies.

## 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Serious Eye Damage / Eye Irritation Hazard Category 2B Skin Sensitizer Hazard Category 1B

# LABEL ELEMENTS



#### Signal Word WARNING

#### **Hazard Statements**

Causes eye irritation May cause an allergic skin reaction

## **Precautionary Statements**

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.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SDS: 0039336

If eye irritation persists: Get medical advice/attention. 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	Carcinogen
Ethoxylated trimethylolpropane triacrylate 28961-43-5	20 - 30	Eye Irrit. 2A (H319) Skin Sens. 1B (H317)	-
25501 10 0			

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 advice if there are persistent symptoms.

SDS: 0039336

## 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:**

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:**

None known

# References to other sections:

See Sections 7, 8 and 13 for additional information.

## 7. HANDLING AND STORAGE

**Precautions:** Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

SDS: 0039336

**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.

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.

SDS: 0039336

## **Exposure Limit(s)**

No values have been established.

## **Biological Exposure Limit(s)**

No values have been established.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Color:** pale yellow **Appearance:** liquid

Odor: ester acrylate
Boiling Point: > 100 °C
Melting Point: Not available

Vapor Pressure: < 0.133 hPa @ 20 °C

Specific Gravity/Density: 1.1 g/cm³
Vapor Density: Not available

Percent Volatile (% by wt.): < 0.5

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

Flash Point: > 100 °C Setaflash

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

(n-octanol/water):

Odor Threshold:

Viscosity (Kinematic):

Viscosity (Dynamic):

Not available

Not available

Low viscous liquid

# 10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable

**Conditions To Avoid:** Avoid direct exposure to sunlight. 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. Avoid temperature

higher than 40°C. Protect from direct sunlight.

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.

**Hazardous Decomposition** 

Products:

oxides of carbon

smoke

hydrocarbons

soot

Nitrous oxides (NOx)

## 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: Causes eye irritation

**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

EBECRYL® LEO 10552 radiation curing

resin

SDS: 0039336

Date Prepared: 01/08/2018

Page 7 of 10

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 rabbit Minimal Acute Irritation eye rabbit Mild

**ALLERGIC SENSITIZATION** 

Sensitization Skin Sensitizing
Sensitization respiratory No data

#### **GENOTOXICITY**

**Assays for Gene Mutations** 

Ames Salmonella Assay Salmonella Not mutagenic

Typhimurium Escherichia coli

#### **OTHER INFORMATION**

By analogy with a product of similar composition.

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

Ethoxylated trimethylolpropane triacrylate has an acute dermal (rabbit) LD50 value of > 13 g/kg. Direct contact with this material may cause moderate eye and minimal skin irritation. Repeated or prolonged skin contact may cause allergic skin reactions. 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.

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

## 12. ECOLOGICAL INFORMATION

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

The ecological properties of this material have not been fully investigated.

Date Prepared: 01/08/2018

## **RESULTS OF PBT AND vPvB ASSESSMENT**

Not determined

#### HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Ethoxylated trimethylolpropane	LC50 = 1.95 mg/l - Zebra Fish (Brachydanio rerio)
triacrylate (28961-43-5)	(96h)

Component / CAS No.	Toxicity to Water Flea
Ethoxylated trimethylolpropane	EC50 70.7 mg/L - Daphnia magna (48h)
triacrylate (28961-43-5)	

Component / CAS No.	Toxicity to Algae
Ethoxylated trimethylolpropane	ErC50 = 2.2 mg/l - Green Algae (Desmodesmus
triacrylate (28961-43-5)	subspicatus) (72h)

Component / CAS No.	Partition coefficient
Ethoxylated trimethylolpropane	Not available
triacrylate (28961-43-5)	

\_\_\_\_\_\_

## 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? Not applicable/Not regulated

Dangerous Goods? Not applicable/Not regulated

#### ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

#### **IMO**

Dangerous Goods? Not applicable/Not regulated

#### 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 included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

SDS: 0039336

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

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

**Australia:** All components of this product are either listed on the Australian Inventory of Chemical Substances, have been assessed by NICNAS or are exempt from notification requirements

**China:** All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

**Japan:** One or more components of this product are NOT included on the Japanese (ENCS and/or ISHL) inventories.

**Korea:** One or more components of this product are NOT included on the Korean (ECL) inventory. The company has obtained the required notification approvals from Ministry of Environment (MOE) as per the "Act on the Registration and Evaluation of Chemical Substances of Korea (K-REACH)" for the component(s) not listed in the Korean Inventory (ECL). The product can be imported/manufactured in Korea ONLY under specific conditions.

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

Date Prepared: 01/08/2018

#### PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

#### **Physical Hazards**

Not applicable

#### **Health Hazards**

Respiratory or Skin Sensitization 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: 04/13/2016

## **Component - Hazard Statements**

Ethoxylated trimethylolpropane triacrylate

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Prepared By: Product Stewardship & 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.