

(Lauryl Methacrylate)
DATE PREPARED: 11/28/2016

## Section 1. Product and Company Identification

Product Name Lauryl Methacrylate

**CAS Number** 142-90-5

Parchem - fine & specialty chemicals

415 Huguenot Street New Rochelle, NY 10801

**)** (914) 654-6800 **(914)** 654-6899

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EMERGENCY RESPONSE NUMBER

CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924 All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

#### Classification of the substance or mixture

Not classified as a hazardous substance or mixture

**Supplemental Hazard Statements:** Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

# GHS Label Elements Pictograms: N/A Signal word: N/A

## Hazard and precautionary statements

None

# Emergency Overview Color: Clear, colorless Physical state: Liquid Odor: Acrylic-like

#### Supplemental information

**Potential Health Effects:** Effects due to processing releases: Irritating to eyes, respiratory system and skin. Prolonged or repeated exposure may cause: headache, drowsiness, nausea, weakness, (severity of effects depends on extent of exposure).

**Other:** This product may release fume and/or vapor of variable composition depending on processing time and temperature. Possible cross sensitization with other acrylates and methacrylates

<sup>\*</sup>Classification of the substance or mixture: Not a hazardous substance or mixture.



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Section 3. Composition / Information on Ingredients

**Common Name** Lauryl Methacrylate

**Synonym(s)** Dodecyl 2-methylacrylate; 2-Propenoic acid, 2-methyl-, dodecyl ester

**CAS Number** 142-90-5

COMPONENT	CAS NUMBER	CONCENTRATION
2-Propenoic acid, 2-methyl-, dodecyl ester	142-90-5	60 – 70%
2-Propenoic acid, 2-methyl-, hexadecyl ester	2495-27-4	20 – 30%
2-Propenoic acid, 2-methyl-, tetradecyl ester	2549-53-3	5 – 10%

#### Section 4. First Aid Measures

Inhalation: If inhaled, remove victim to fresh air.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing

and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eyes:** Immediately flush eye(s) with plenty of water.

Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by

mouth to an unconscious person.

# Section 5. Firefighting Measures

**Extinguishing media (suitable):** Water spray, Carbon dioxide (CO<sub>2</sub>), Foam, Dry chemical **Protective equipment:** Firefighters and others who may be exposed to products of combustion should wear full firefighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand/NIOSH-approved or equivalent).

**Further firefighting advice:** Fight fire from a protected location. Cool closed containers exposed to fire with water spray. Closed containers of this material may explode when subjected to heat from surrounding fire. Firefighting equipment should be thoroughly decontaminated after use.

**Fire and explosion hazards:** When burned, the following hazardous products of combustion can occur: Carbon oxides; Hazardous organic compounds

Polymerization is exothermic and can degenerate into an uncontrolled reaction.

#### Section 6. Accidental Release Measures

In case of spill or leak: Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.



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Section 7. Handling and Storage

## Handling

**General information on handling:** Avoid breathing processing vapor or mist. Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing.

### **Storage**

**General information on storage conditions:** Store out of direct sunlight in a cool well-ventilated place. Keep stabilizer levels constant to avoid explosive polymerization. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere. **Storage stability - Remarks:** Inhibitor levels should be maintained. The typical shelf-life for this product is 6 months.

**Storage incompatibility - General:** Store separate from: Strong oxidizing agents; Strong reducing agents; Free radical generators; Inert gas; Oxygen scavenger; Peroxides

Temperature tolerance - Do not store below:  $32^{\circ}F$  (0°C) Temperature tolerance - Do not store above:  $100^{\circ}F$  (38°C)

Section 8. Exposure Controls / Personal Protection

#### **Airborne Exposure Guidelines**

**Engineering controls:** Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

**Respiratory protection:** Avoid breathing processing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

**Skin protection:** Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Avoid natural rubber gloves. Wash hands and contaminated skin thoroughly after handling.

**Eye protection:** Use good industrial practice to avoid eye contact.



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#### Section 9. Physical and Chemical Properties

Color: Clear, colorless
Physical state: Liquid
Odor: Acrylic-like

Odor threshold: No data available

Flash point > 212°F (100°C) (Pensky-Martens Closed Cup)

Auto-ignition temperature: No data available Lower flammable limit (LFL): No data available Upper flammable limit (UFL): No data available

**pH:** ~ 7

Density: No data available

Specific Gravity (Relative density): 0.872 (77°F/25°C)

**Vapor pressure:** No data available **Vapor density:** No data available

Boiling point/boiling range: No data available

Freezing point: No data available
Melting point/range: No data available
Evaporation rate: No data available
Solubility in water: Negligible

**Viscosity, dynamic:** 6 mPa\*s 77°F (25°C) (Method: Brookfield)

Oil/water partition coefficient: No data available

Thermal decomposition No data available Flammability (solid, gas): Not relevant

#### Section 10. Stability and Reactivity

**Stability:** This material is chemically stable under normal and anticipated storage, handling and processing conditions. However, this material can undergo hazardous polymerization.

**Hazardous reactions:** Hazardous polymerization may occur.

Polymerization is exothermic and can degenerate into an uncontrolled reaction.

Materials to avoid: Strong oxidizing agents; Strong reducing agents; Free radical generators;

Inert gas; Oxygen scavenger; Peroxides

**Conditions / hazards to avoid:** This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat. Avoid direct sunlight. Do NOT expose to ultraviolet light.

**Hazardous decomposition products:** Thermal decomposition giving flammable and toxic products: Carbon oxides; Methacrylates; Hazardous organic compounds

#### Section 11. Toxicological Information

Data on this material and/or its components are summarized below.

**Oral:** Acute toxicity estimate > 5,000 mg/kg.





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# Data for Dodecyl methacrylate (142-90-5)

**Acute Toxicity** 

**Dermal:** Practically nontoxic. (Rabbit) LC50 > 3.000 mg/kg. **Inhalation:** No deaths occurred. (Rat) 1 h (saturated vapor)

**Skin Irritation:** Causes mild skin irritation. (Rabbit) Irritation Index: 1.33 / 4. (4 h) (similar

material)

**Eye Irritation:** Causes mild eye irritation. (Rabbit)

**Skin Sensitization:** Not a sensitizer. LLNA: Local Lymph Node Assay. (Mouse) No skin allergy

was observed (similar material)

## Repeated dose toxicity

Repeated inhalation administration to Rat / No adverse systemic effects reported. (vapor) Repeated oral administration to Rat / No adverse systemic effects reported.

#### Genotoxicity

Assessment in Vitro: No genetic changes were observed in a laboratory test using: bacteria

### Genotoxicity

**Assessment in Vivo:** No genetic changes were observed in a laboratory test using: mice **Developmental toxicity:** Reproductive/Developmental Effects Screening Assay. oral (Rat) / No birth defects were observed.

**Reproductive effects:** Reproductive/Developmental Effects Screening Assay. oral (Rat) / No toxicity to reproduction.

Other information: Possible cross sensitization with other acrylates and methacrylates

#### Data for Hexadecyl methacrylate (2495-27-4)

Acute toxicity

**Skin Irritation:** Causes mild skin irritation. (Rabbit) (estimate based on composition) **Eye Irritation:** Causes mild eye irritation. (Rabbit) (estimate based on composition)

Skin Sensitization: Not a sensitizer. LLNA: Local Lymph Node Assay. (Mouse) (estimate based on

composition)

Other information: The information presented is from representative materials in this chemical

class. The results may vary depending on the test substance.

Possible cross sensitization with other acrylates and methacrylates

# Data for Tetradecyl methacrylate (2549-53-3)

Acute toxicity

**Skin Irritation:** Causes mild skin irritation. (Rabbit) (estimate based on composition) **Eye Irritation:** Practically non-irritating (Rabbit) (estimate based on composition)

Skin Sensitization: Not a sensitizer. LLNA: Local Lymph Node Assay. (Mouse) (estimate based on

composition)

**Other information:** The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.



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Possible cross sensitization with other acrylates and methacrylates

Section 12. Ecological Information

**Chemical Fate and Pathway:** Data on this material and/or its components are summarized below.

Data for 2-Propenoic acid, 2-methyl-, dodecyl ester (142-90-5) Biodegradation: Readily biodegradable. (28 d) biodegradation 88.50 %

Octanol Water Partition Coefficient: log Pow 6.57

Data for 2-Propenoic acid, 2-methyl-, tetradecyl ester (2549-53-3)

Octanol Water Partition Coefficient: log Pow 7.66 (calculated)

**Ecotoxicology:** Data on this material and/or its components are summarized below.

Data for 2-Propenoic acid, 2-methyl-, dodecyl ester (142-90-5)

Aquatic toxicity data: No effect up to the limit of solubility. Oncorhynchus mykiss (rainbow trout)

96 h

**Algae:** Desmodesmus subspicatus (green algae) 72 h (No effect up to the limit of solubility.)

Chronic toxicity to aquatic invertebrates: Daphnia magna (Water flea) 21 d EC50 > 0.006

mg/l (No effect up to the limit of solubility)

Data for 2-Propenoic acid, 2-methyl-, tetradecyl ester (2549-53-3)

Information given is based on data obtained from similar substances.

**Aquatic toxicity data:** No effect up to the limit of solubility. Oncorhynchus mykiss (rainbow trout) 96 h

**Algae:** Desmodesmus subspicatus (green algae) 72 h (No effect up to the limit of solubility.)

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**US Department of Transportation (DOT):** Not regulated

International Maritime Dangerous Goods Code (IMDG): Not regulated



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# Section 15. Regulatory Information

**Chemical Inventory Status** 

Chemical inventory Status		
EU. EINECS	EINECS	Conforms to
United States TSCA Inventory	TSCA	The components of this
		product are all on the TSCA
		Inventory.
Canadian Domestic Substances List (DSL)	DSL	All components of this product
		are on the Canadian DSL.
China. Inventory of Existing Chemical	IECSC (CN)	Conforms to
Substances in China (IECSC)		
Japan. ENCS - Existing and New Chemical	ENCS (JP)	Conforms to
Substances Inventory		
Japan. ISHL - Inventory of Chemical	ISHL (JP)	Conforms to
Substances		
Korea. Korean Existing Chemicals Inventory	KECI (KR)	Conforms to
(KECI)		
Philippines Inventory of Chemicals and	PICCS (PH)	Conforms to
Chemical Substances (PICCS)		
Australia Inventory of Chemical Substances	AICS	Conforms to
(AICS)		
(AIC3)		

#### **United States - Federal Regulations**

**SARA Title III - Section 302 Extremely Hazardous Chemicals:** The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

**SARA Title III - Section 311/312 Hazard Categories:** Reactivity Hazard **SARA Title III - Section 313 Toxic Chemicals:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- **Reportable Quantity (RQ):** The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

## **United States - State Regulations**

**New Jersey Right to Know:** No components are subject to the New Jersey Right to Know Act.



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Pennsylvania Right to Know

Chemical Name	CAS-No.
2-Propenoic acid, 2-methyl-, dodecyl ester	142-90-5
Hexadecyl methacrylate	2495-76-3
2-Propenoic acid, 2-methyl-, tetradecyl ester	2549-53-3

## California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Chemical NameCAS-No.	
Benzene, methyl-	108-88-3

#### Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

**REVISION DATE: 11/28/2016**