## 1. PRODUCT AND COMPANY IDENTIFICATION

**Company**

**Arkema Inc.**
**900 First Avenue**
**King of Prussia, Pennsylvania 19406**

**Sartomer**

**Customer Service Telephone Number:** (800) SARTOMER
(Monday through Friday, 8:30 AM to 5:30 PM EST)

**Emergency Information**

**Transportation:** CHEMTREC: (800) 424-9300
(24 hrs., 7 days a week)
**Medical:** Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

**Product Information**

**Product name:** SR350 T
**Synonyms:** Trimethylolpropane trimethacrylate
**Molecular formula:** C18H28O6
**Chemical family:** METHACRYLATE ESTER
**Product use:** Adhesives and/or sealants, Coatings, Inks, Paints

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**
**Color:** colorless to light yellow
**Physical state:** liquid
**Odor:** acrylic-like

***Classification of the substance or mixture:**
Chronic aquatic toxicity, Category 2, H411

*For the full text of the H-Statements mentioned in this Section, see Section 16.

**GHS-Labelling**

Hazard pictograms:

**Hazard statements:**

H411 : Toxic to aquatic life with long lasting effects.

**Supplemental Hazard Statements:**

Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

**Precautionary statements:**

**Prevention:**

P273 : Avoid release to the environment.

**Response:**

P391 : Collect spillage.

**Disposal:**

P501 : Dispose of contents/ container to an approved waste disposal plant.

**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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No. | Wt/Wt | GHS Classification** |
|---|---|---|---|
| 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester | 3290-92-4 | <= 100 % | H411 |

**For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**Inhalation:**

If inhaled, remove to fresh air.

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

## 5. FIREFIGHTING MEASURES

**Extinguishing media (suitable):**
Water spray, Carbon dioxide (CO2), Foam, Dry chemical

**Protective equipment:**
Fire fighters and others who may be exposed to products of combustion should wear full fire fighting 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.
Fire fighting equipment should be thoroughly decontaminated after use.
Do not allow run-off from fire fighting to enter drains or water courses.

**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.

## 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.

## 7. HANDLING AND STORAGE

**Handling**

**General information on handling:**
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.
Avoid breathing vapor or mist.

**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 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 °F (0 °C)

**Temperature tolerance – Do not store above:**
100 °F (38 °C)

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Airborne Exposure Guidelines:**

**2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (3290-92-4)**

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

| | |
|---|---|
| Skin designation | |
| **Remarks:** | Can be absorbed through the skin. |
| time weighted average | 1 mg/m3 |
| **Remarks:** | Avoid skin or eye contact with liquids or aerosols. |
| **Remarks:** | Listed |

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

**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:**
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 and substances released during processing. 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. Avoid breathing processing fumes or vapors.

**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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Color:** | colorless to light yellow |
| **Physical state:** | liquid |
| **Odor:** | acrylic-like |
| **Odor threshold:** | No data available |
| **Flash point** | > 280 °F (138 °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):** | 1.061 (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:** | 30 - 60 mPa.s 77 °F (25 °C) (Method: Brookfield) |
| **Oil/water partition coefficient:** | No data available |
| **Thermal decomposition** | 402.31 °F (205.73 °C) |
| **Flammability (solid, gas):** | Not relevant |

## 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 polymerisation 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

## 11. TOXICOLOGICAL INFORMATION

**Data for SR350 T**

**Acute toxicity**

**Oral:**
Practically nontoxic. (rat) LD50 > 5,000 mg/kg.

**Dermal:**
Practically nontoxic. (rabbit) LD50 > 5,000 mg/kg.

**Inhalation:**
No deaths occurred. (rat) 8 h Exposure time (saturated vapor)

**Skin Irritation:**
Causes mild skin irritation. (rabbit) (4 - 6 h)

Causes skin irritation. (rabbit) (5 d) (Repeated skin exposure)

**Eye Irritation:**
Causes mild eye irritation. (rabbit) 0.0 - 8.1 / 110.

**Skin Sensitization:**
Not a sensitizer. Guinea pig maximization test. (guinea pig) Both positive and negative responses have been reported.

**Repeated dose toxicity**
Repeated dermal administration to mouse / affected organ(s): skin, site of contact / signs: structural organ changes, fibrosis

Repeated oral administration to rat / No adverse systemic effects reported.

**Carcinogenicity**
Chronic dermal administration to mouse / No increase in tumor incidence was reported. (According to limited available data)

**Other information**
Possible cross sensitization with other acrylates and methacrylates

## 12. ECOLOGICAL INFORMATION

**Chemical Fate and Pathway**
Data on this material and/or a similar material are summarized below.

**Data for SR350 T**

**Biodegradation:**
Not readily biodegradable. (28 d) biodegradation 29 - 53 %

**Octanol Water Partition Coefficient:**
log Pow = 2.7 - 4.2

**Ecotoxicology**
Data on this material and/or a similar material are summarized below.

**Data for SR350 T**

**Aquatic toxicity data:**
Toxic. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 2 mg/l

**Aquatic invertebrates:**
Toxic. Daphnia magna (Water flea) 48 h EC50 = 9.22 mg/l

**Algae:**
Toxic. Pseudokirchneriella subcapitata (green algae) 72 h EC50 = 1.11 - 3.88 mg/l

**Microorganisms:**
Respiration inhibition / Activated sludge 3 h EC50 > 1,000 mg/l

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal:**
Disposal via incineration is recommended. Dispose of in accordance with federal, state and local regulations. 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. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

Take appropriate measures to prevent release to the environment.

## 14. TRANSPORT INFORMATION

**US Department of Transportation (DOT)**

| | | |
|---|---|---|
| UN Number | : | 3082 |
| Proper shipping name | : | Environmentally hazardous substances, liquid, n.o.s. |
| Technical name | : | (Trimethylolpropane trimethacrylate) |
| Class | : | 9 |
| Packaging group | : | III |
| Marine pollutant | : | yes |

**International Maritime Dangerous Goods Code (IMDG)**

| | | |
|---|---|---|
| UN Number | : | 3082 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| Technical name | : | (Trimethylolpropane trimethacrylate) |

| | | |
|---|---|---|
| Class | : | 9 |
| Packaging group | : | III |
| Marine pollutant | : | yes |
| Flash point | : | > 280 °F (138 °C) Pensky-Martens closed cup |

## 15. REGULATORY INFORMATION

**Chemical Inventory Status**

| | | |
|---|---|---|
| EU. EINECS | EINECS | Conforms to |
| US. Toxic Substances Control Act | TSCA | The components of this product are all on the TSCA Inventory. |
| Australia. Industrial Chemical (Notification and Assessment) Act | AICS | Conforms to |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) | DSL | All components of this product are on the Canadian DSL. |
| Japan. Kashin-Hou Law List | ENCS (JP) | Conforms to |
| Korea. Existing Chemicals Inventory (KECI) | KECI (KR) | Conforms to |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | PICCS (PH) | Conforms to |
| China. Inventory of Existing Chemical Substances | IECSC (CN) | Conforms to |

**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:**
SARA 313: 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.

**Pennsylvania Right to Know**

| Chemical Name | CAS-No. |
|---|---|
| 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester | 3290-92-4 |

**California Prop. 65**
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Chemical Name | CAS-No. |
|---|---|
| Benzene, methyl- | 108-88-3 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

H411 Toxic to aquatic life with long lasting effects.

**Latest Revision(s):**

| | |
|---|---|
| Reference number: | 000000089624 |
| Date of Revision: | 04/02/2014 |
| Date Printed: | 04/03/2014 |

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