

Engineered Polymers International, LLC

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Material Safety Data Sheet

AOSR

In an Emergency Call Chemtrec at 1-800-424-9300

1. Product Identification

Trade Name: AOSR

Chemical Family: Acrylic Oligomer

Health	2
Flammability	1
Reactivity	2
Protective Equipment	D**

Intended Use or Product Type: Additive

HMIS RATING

**Respiratory protection may be necessary depending on conditions of use. Refer to Section 8 of the MSDS for additional information on respiratory protection.

2. Composition/Information on Ingredients

OSHA Hazardous Ingredients:

O S H A	CAS No.	Chemical Identity	Exposure Limits				Carcinogen Status			
			ACGIH		OSHA		TMTPA (AIHA)	IA RC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	156256-89-5 Common Name	Trimethylopropane Triacrylate (60%)	NE	NE	NE	NE	1 mg/m ³ (8 hours skin)	NR	NR	NR
*	Trade Secret Common Name	Oligomers (40%)	NE	NE	NE	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed * = OSHA Hazardous

Ingredient

3. Summary of Hazards

Warning

Physical Hazards:

Unstable (reactive) upon depletion of inhibitor

Acute Health Hazards:
(Short-Term)

Slight eye irritant
Moderate skin irritant
Skin sensitizer
Slight skin absorption hazard
Respiratory tract irritation hazard
No ingestion hazard identified from data found

Chronic Health Hazards:
(Long-Term)

See supplement section of MSDS for chronic health effects information

4. Health Hazards

Routes of Exposure

Ingestion: No significant signs or symptoms indicative of any adverse health hazard are expected to occur because of ingestion.

Skin Absorption: Extensive/prolonged or repeated exposure to this material can result in significant absorption. Symptoms of systemic toxicity may include convulsions, tremors and ataxia.

Skin Irritation: This material has been shown to be a moderate skin irritant and an allergic sensitizer. Symptoms of irritation may include redness or rash, swelling of the affected area and blistering. Prolonged or repeated skin contact may cause a more severe skin response such as ulcers and scarring.

Inhalation: No significant signs or symptoms indicative of any adverse health hazard are expected to occur at standard conditions due to the low volatility of this material. However, aerosols, or vapors, which may be generated at elevated processing temperatures, may cause respiratory tract irritation. Symptoms of irritation may include coughing, mucous production and shortness of breath.

Eyes: May cause minor eye irritation. Symptoms may include excessive tearing, blinking and redness.

Medical Conditions Aggravated by Exposure: This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

Additional Information: Promptly remove wet contaminated non-impervious clothing. Wash before reuse.

5. FIRE FIGHTING MEASURES

Flash Point: Method= (PMCC) >200°F (>93°C)
Autoignition Temp. Method= N/DA

Flammable Limits (% Volume in Air): Lower: N/DA Upper: N/DA

Fire Fighting Extinguishing Media: Carbon dioxide, foam, dry chemical, water spray, water fog.

Fire Fighting Equipment: Do not enter fire area without proper protection. Decomposition products possible. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Water may be ineffective in firefighting due to low solubility. Use water spray/fog for cooling. Pressure relief system may plug with solids, increasing risk of overpressure. Notify authorities if liquid enters sewer/public waters.

Fire and Explosion Hazards: High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during runaway polymerization.

6. OCCUPATIONAL EXPOSURE LIMITS

SUBSTANCE	SOURCE	DATE	TYPE	VALUE	TIME
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A PEL or TLV has not been established

7. HANDLING AND STORAGE

Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often, adding to bulk liquid if needed. Do not blanket or mix with oxygen-free gas as it renders inhibitor ineffective. Prevent freezing – inhibitor can separate as a solid. If frozen, warm and remix material gently (90F). **DO NOT USE DRUM HEATER.** Prevent moisture contact. Store in tightly closed, properly vented containers away from heat, sparks, open flame, strong oxidizers, radiation and other initiators. Prevent contamination by foreign materials. Use only non-sparking tools and limit storage time.

DECONTAMINATION PROCEDURES

Follow standard plant procedures or supervisor's instructions for decontamination operations.

8. PROTECTIVE EQUIPMENT/CONTROL MEASURES

RESPIRATORY PROTECTION

If this material is handled at elevated temperature or under mist forming conditions, NIOSH/MSHA approved respiratory protection equipment should be used.

EYE PROTECTION

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor. Contact lenses should not be worn.

SKIN PROTECTION

When skin contact is possible, protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn. This equipment must be cleaned thoroughly after each use.

ENGINEERING CONTROLS

If handling results in aerosol or vapor generation, local exhaust ventilation is recommended.

OTHER HYGIENIC PRACTICES

Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor: Bland

Physical State: Clear liquid

Solubility in Water: Negligible

Specific Gravity: H₂O =1 at 39.2F) 1.03-1.05 at 25C/77F

Boiling Point: N/DA

Freezing Point: N/DA

Dry Point: N/DA

pH: AP 6.8 to 7.2

Vapor Pressure: LT 0.001mm Hg at 25C/77F AP 0.5 mm Hg at 100C/212F

Vapor SO GR (AIR=1 AT 60 – 90 F) GT 1

Volatile Characteristics: Negligible

Viscosity Units, Temp. (Brookfield) AP 10 to 20 cps at 25C/77F

Stability: Stable

Hazardous Polymerization: May occur

Conditions and materials to avoid: High temperatures, localized heat sources (i.e., drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.

Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

10. EMERGENCY AND FIRST AID

INHALATION

If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

EYE CONTACT

In case of eye contact, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention if pain, blinking, tears or redness persists.

SKIN CONTACT

Immediately remove contaminated clothing. Wash skin thoroughly with mild soap/water. Flush w/lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

INGESTION

If a large quantity is swallowed, give lukewarm water (pint) if the victim is completely/alert. Do not induce vomiting; risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

EMERGENCY MEDICAL TREATMENT PROCEDURES

Treat burns or allergic reactions conventionally after decontamination.

11. SPILL AND DISPOSAL CONSIDERATIONS

PRECAUTION IF MATERIAL IS SPILLED OR RELEASED

Spilled or released material may polymerize and release heat/gases. Extinguish all ignition sources and ventilate area. Wear protective equipment during clean up. Dike and recover large spill. Soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean up. For spills on water, contain, minimize dispersion and collect. Dispose/report per regulatory requirements.

WASTE DISPOSAL METHODS

Non-contaminated, properly inhibited product is not a RCRA hazardous waste. However, contaminated product/soil/water may be RCRA/OSHA hazardous waste due to potential for internal heat generation (see 40 CFR 261 and 29 CFR 1910). It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Comply with all applicable federal, state and local regulations. Use registered sites; fuel blending or incinerating liquids. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade; avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

12. LABEL INFORMATION

USE STATEMENT

FOR INDUSTRIAL USE ONLY

SIGNAL WORD

WARNING

PHYSICAL HAZARDS

UNSTABLE (REACTIVE) UPON LOSS OF INHIBITOR

HEALTH HAZARDS

CAUSES SKIN IRRITATION

MAY CAUSE ALLEERGIC SKIN REACTION

PRECAUTIONARY MEASURES

HAZARDOUS POLYMEEERIZATION MAY OCCUR UPON DEPLETION OF INHIBITOR.

DO NOT HANDLE NEAR HEAT, SPARKS, OR OPEN FLAME.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID BREATHING VAPORT/MISTS.

USE ONLY WITH ADEQUATE VENTILATION/PERSONAL PROTECTION.

WASH THOROUGHLY AFTER HANDLING.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

BEFORE USING PRODUCT, READ MATEERIAL SAFETY DATA SHEET (MSDS).

13. TRANSPORT INFORMATION

DOT:

Proper Shipping Name: N/AP

Hazard Class: Not regulated

ID Number: NA

Packing Group: NA

14. REGULATORY INFORMATION

US Federal Regulations:

TSCA Status: All components of this product are listed, or excluded form listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

CALIFORNIA PROPOSITION 65: California Proposition 65 Information: This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

15. OTHER INFORMATION

Disclaimer: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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