

Issue Date 2015-06-25

Revision Date 2023-06-09

Version

3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifiers

Product Name: MakarttPro Low Odor Premium Monomer
Product Code: LIQU001, LIQU007

Recommended Use of the substance or mixture and Restrictions on Use

Professional Use Only

Details of the Supplier of the Safety Data Sheet

Supplier Address

2001 N Lamar, Suite 240, Dallas, TX 75202
Website: www.makarttpro.com
E-mail: support@makrttpro.com

Emergency Telephone Numbers

Company Phone Number: (855) 981-9198 (During Business Hours, 8:00am - 4:00pm EST)

Emergency Telephone: CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Hazard Class - Physical, Health, Environmental

	Category
Flammable Liquid	3
Skin Corrosive/Irritation	2
Eye Corrosive/Irritation	2A
Skin sensitizer	1
Carcinogen	2

Label Elements - Pictograms, Signal Word, Hazard Statements, Precautionary Statements, & Supplemental Information



Signal Word

Warning

Hazards Statements

H22 Flammable liquid and vapour
6 Causes skin irritation
H31 May cause an allergic skin reaction
5 Causes serious eye irritation
H31 Suspected of causing cancer
7
H31
9
H35
1

Precautionary Statements - Prevention, Response, & Disposal

P20 Obtain special instructions before use
1 Do not handle until all safety precautions have been read and understood
P20
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking
P23 Keep container tightly closed
3 Ground and bond container and receiving equipment
P24 Use explosion-proof electrical/ventilating/light/.../equipment
0
P24 Use only non-sparking tools
1
1 Take precautionary measures against static discharge
P24

P26	Avoid breathing dust/fume/gas/mist/vapours/spray
1	Wash hands and exposed skin thoroughly after handling
P26	
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281 P321	Use personal protective equipment as required
P362 P363	Specific treatment (see ... on this label)
P302+P35	Take off contaminated clothing and wash before reuse
2	Wash contaminated clothing before reuse
P303+P36	IF ON SKIN: Wash with soap and water
1	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
+P353	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P305+P35	
1	
+P338	IF exposed or concerned: Get medical advice/attention
P308+P31	IF skin irritation occurs: Get medical advice/attention
3	
P332+P31	IF skin irritation or a rash occurs: Get medical advice/attention
3	
P337+P31	Get medical advice/attention
3	In case of fire: Use CO2 for extinction
P370+P37	Store locked up
8 P405	Store in a well ventilated place. Keep cool
P403+P23	Dispose of contents/container to an authorized disposal facility
5 P501	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	Cas No.	Weight-%	GHS Ratings
Proprietary Component		80 90	Skin Corrosive/Irritation 2 (H315) Eye Corrosive/Irritation 2A (H319) Skin Sensitizer 1 (H317) Specific Target Organ Toxin - Single Exposure 3 (H335,H336)
Hydroxypropyl Methacrylate (HPMA)	27813-02-1	5 10	Eye Corrosive/Irritation 2A (H319) Skin Sensitizer 1 (H317)
Dimethyltolylamine	99-97-8	0 1	Oral Toxicity Acute Tox. 3 Dermal Toxicity Acute Tox. 3 Inhalation Toxicity Acute Tox. 3 Carcinogen 2 (H351) Specific Target Organ Toxin - Repeated Exposure 2 (H373) Acute Aquatic Toxicity C3

*Component names may have been omitted to protect confidential business information (CBI) in compliance with OSHA GHS HCS §1910.1200 Appendix E. A full disclosure safety data sheet can be supplied in emergency and non-emergency situations upon written request.

4. FIRST AID MEASURES

General Advice

Provide the SDS to medical personnel for treatment.

Inhalation:

Remove victim to fresh air. Seek immediate medical attention.

Eye Contact:

If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

Skin Contact:

Rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

Clothing:

Remove contaminated clothing, wash thoroughly before reuse.

Ingestion:

If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

Notes to Physician:

This product contains N,N-Dimethyl-p-Toluidine at a low concentration (does not meet criteria for reporting in section 3). While complications from this component are not expected, the presence of this material in the body leads to formation of methemoglobin, which in sufficient concentration causes cyanosis. This is reversed spontaneously after termination of exposure. Treat cyanosis with supportive measures such as bed rest and oxygen inhalation. Thoroughly cleanse the entire contaminated area of the body. If extensive cyanosis is present, treat with methylene blue and vitamin B12.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Chemical (alcohol-resistant) foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media

Water spray or water stream may not be effective.

Specific Hazards Arising from the Chemical

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 a runaway polymerization. This product is a flammable liquid. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. Vapor forms an explosive mixture with air.

Hazardous Combustion Products

Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

Special Fire Fighting Procedures:

Use a water spray or fog to reduce or direct vapors, and keep containers cool. Water may not be effective in actually extinguishing a fire involving this product. Do not enter fire area without proper protection. Fight fire from a safe location. Structural firefighters must wear SCBAs and full protective equipment. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries.

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Do not enter fire area without proper protection. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray to cool unopened containers. Pressure relief system may plug with solids creating risk of overpressure.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Before cleaning any spill or leak, individuals must wear appropriate Personal Protective Equipment that is specified in section 8. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental Precautions

Extinguish all ignition sources. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. May contaminate water supplies/be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Methods and Material for Containment and Cleaning Up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Dike and contain spill with inert material (e.g. sand or earth). May contaminate water supply.

Methods for Cleaning Up

Maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of product release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling

Keep away from heat, sparks, and flame. Keep container closed after each use. Do NOT use localized heat source such as band heaters to heat/melt product. Do NOT use steam. Hot boxes or hot rooms are recommended for heating the product, which can be set at a maximum temperature of 60°C/140°F. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping. After use, wash hands and exposed skin with soap and water. Do not eat, drink, or smoke while handling product. Observe precautions found on label. Keep away from heat, sparks, and flame. Keep container closed after each use. Ground and bond all containers when transferring. Refer to Section 8 for suggested exposure controls and personal protection. Observe precautions found on label

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Store in accordance with National Fire Protection Association recommendations. Check inhibitor levels periodically, adding to the bulk material if needed. Maintain at a minimum, the original 2-inch headspace in the product container and do not blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Vapors are uninhibited and may form polymers in vents or flame arresters, resulting in blockage of vents. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

Incompatible Materials

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
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Proprietary Component			
Hydroxypropyl Methacrylate (HPMA) 27813-02-1			
Dimethyltolylamine 99-97-8			

Engineering Controls

Use local explosion-proof ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personnel Protective Equipment (PPE)**Respiratory Protection**

A respirator should be worn whenever workplace conditions warrant a respirators use. None required if airborne concentrations are maintained below the exposure limit listed above. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

Eye/Face Protection

Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

Skin and Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact:

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Splash contact:

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 120 min

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear	Physical State: Liquid
Odor: Acrid	Flash Point: 73°F, 23°C
Flammable Limit (Air Volume %, Lower / Upper) N/A	Autoignition Temperature: 355°C
Evaporation Rate	Boiling Range (low - high): N/A
Specific Gravity: 0.94	

10. STABILITY AND REACTIVITY

Note: Materials listed as stable may become unstable upon depletion of inhibitors (such as mequinol or hydroquinone), contact the manufacturer for exact levels and instructions on inhibitor maintenance.

Material stability

Stable

Incompatible materials

No data available

Hazardous decomposition products

No data available

Possibility of hazardous reactions

Hazardous polymerization may occur.

11. TOXICOLOGICAL INFORMATION**Mixture Toxicity**

Inhalation Toxicity: 140mg/L

Component Toxicity

99-97-8

Dimethyltolylamine

Oral: 1,650 mg/kg (Rat) Dermal: 500 mg/kg (Rat) Inhalation: 1,400 mg/m³ (Rat)

Routes of Exposure

Inhalation

Skin Contact

Eye Contact

Ingestion

Target Organs

Central Nervous System

Respiratory System

Effects of Overexposure**Product Components Listed as Carcinogenic**

CAS Number	Description	% Weight	Carcinogen Rating
99-97-8	Dimethyltolylamine	0.1% - 1.0%	Dimethyltolylamine: DMPT is known to the State of California to be a carcinogen, and is a Prop. 65 listed chemical. DMPT is a listed carcinogen by NTP DMPT is not listed as a carcinogen by IARC, and ACGIH

12. ECOLOGICAL INFORMATION**Component Ecotoxicity**

Dimethyltolylamine

96 Hr LC50 Pimephales promelas: 42 - 50.5 mg/L [flow-through]

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. When discarded as shipped it is a hazardous waste by the EPA under RCRA. After addition of excess

inhibitor, dispose waste material in accordance with Federal, State, and Local regulations. Comply with all applicable federal, state and local regulations. Waste disposal options include landfilling solids at permitted sites. Incinerate in a chemical incinerator equipped with an afterburner and scrubber. Use registered transporters.

Contaminated Packaging

Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State and Local regulations

14. TRANSPORT INFORMATION

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	ETHYL METHACRYLATE, STABILIZED, SOLUTION DOT RQ: EMA=1000lbs	UN2277	II	3
IATA	ETHYL METHACRYLATE, STABILIZED, SOLUTION	UN227	I	3
IMDG	ETHYL METHACRYLATE, STABILIZED, SOLUTION MARINE POLLUTANT: No	7 UN227 7	I I I	3 3 3

15. REGULATORY INFORMATION

State of California Safe Drinking Water and Toxic Enforcement Act of 1986

(Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:
99-97-8 Dimethyltolylamine 0.1 - 1.0% Carcinogen

SARA 313

No data available

US State Right-to-Know Regulations

No data available

Country	Regulation	All Components Listed
	Canada DSL	No No No No
	EINECS	
	SARA Hazard categories	
	TSCA Inventory	

16. OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	2
PERSONAL PROTECTION	B

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

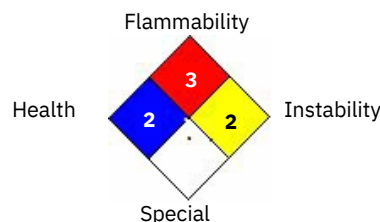
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



Date Prepared: 6/9/2023

2015-06-25

Reviewer Revision 3

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials on in any process, unless specified in the text.

