SECTION 1: IDENTIFICATION

Product Name: Acrylic Liquid - Coffee
Synonyms: 
CAS Number: 80-62-6

Company Business Contact
La Palm Spa Products, LLC
3201 N Mead
Wichita, KS 67219
Phone: (316) 425-2500
Fax: (316) 425-2300

24 Hour Emergency Contact
Chemtrec: 800-424-9300

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C5H8O2
CAS No: 80-62-6

SECTION 3: HAZARDS IDENTIFICATION

Appearance
Form: liquid coffee
Color: light purple
Odor: coffee odor

Hazard Summary
WARNING!
FLAMMABLE LIQUID AND VAPOR.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
LIVER AND KIDNEY INJURIES MAY OCCUR.
REACTIVE MONOMER

Potential Health Effects
Primary Routes of Entry: Inhalation
Eye contact
Skin contact

Eyes: Material can cause the following:
slight irritation

Skin: Material can cause the following:
Moderate irritation.
May cause sensitization by skin contact.

Ingestion: May be harmful if swallowed.
Inhalation: Inhalation of vapor or mist can cause the following:
irritation of nose, throat, and lungs
Inhalation of vapor or mist is
harmful; possibly fatal in high concentrations.

Chronic Exposure: Prolonged or repeated overexposure at near lethal concentrations can cause the following:
kidney damage
liver damage

Methyl methacrylate  
ACGIH  
Sensitizer.
Methyl methacrylate  
ACGIH  
Not classifiable as a human carcinogen.
Methyl methacrylate  
IARC  
Not classifiable as to carcinogenicity to humans.
Methyl methacrylate  
IRIS  
Not a human carcinogen.
Methyl methacrylate  
IRIS  
IRIS E: Evidence of non-carcinogenicity for humans [1986 Guidelines]; Not likely to be carcinogenic to humans [1996 Guidelines]

SECTION 4: FIRST AID MEASURES

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician immediately.

Skin contact: Wash off with soap and plenty of water. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.

Ingestion: Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Consult a physician. If vomiting occurs spontaneously, keep airway clear.

SECTION 5: FIRE FIGHTING MEASURES

Flash point  
8 °C (46 °F) SETAFIASH CLOSED CUP
Ignition temperature  
435.0 °C (815.00 °F)
Lower explosion limit  
2.10 %(V)
Upper explosion limit  
12.50 %(V)

Suitable extinguishing media: Water spray
Dry powder
Foam
Alcohol-resistant foam
Carbon dioxide (CO2)

Specific hazards during fire fighting: Vapors can travel to a source of ignition and flash back. Heat
can cause polymerization. Heated containers can explode.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus and protective suit.

**Further information:** EXPLOSION HAZARD. Fight advanced fires from a protected location. Cool containers / tanks with water spray.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

#### Environmental precautions

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. Do not allow material to contaminate ground water system.

#### Methods for cleaning up

Remove all sources of ignition. Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Contaminated monomer may be unstable. Add inhibitor to prevent polymerization. Absorbent can act as a contaminant (removes inhibitor) in liquid monomer. Avoid freestanding monomer with absorbent or add inhibitor to stabilize. Dispose of promptly.

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### SECTION 7: HANDLING AND STORAGE

#### Handling

May cause sensitization of susceptible persons by skin contact. For personal protection see section 8. Ground all metal containers during storage and handling.

#### Storage

**Storage conditions:** Minor deviations (7C/13F) above the recommended temperature (see below) are acceptable for short periods of time (one week) for material in transit. Store in cool place. Keep away from direct sunlight. Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Ground all metal containers during storage and handling. This product contains inhibitor to stabilize it during shipment and storage. The effectiveness of the inhibitor is dependent on the presence of dissolved oxygen. In order to maintain sufficient dissolved oxygen in the liquid to avoid polymerization, the monomer must always be stored with a vapor space oxygen concentration of 5% to 21%(air). Store material in containers made of the following: Stainless steel Carbon steel glass Aluminum Keep container tightly closed.

**Storage temperature:** <= 38 °C (<= 100 °F)

**Storage period:** 12 Months

**Other data:** Use monomer within the recommended storage period from date of manufacture to avoid loss of stability or risk of polymerization.

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure limit(s)
Exposure limits are listed below, if they exist.

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>Rohm and Haas</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td>Rohm and Haas</td>
<td>STEL</td>
<td>75 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>100 ppm</td>
</tr>
<tr>
<td></td>
<td>NIOSH/GUIDE</td>
<td>REL</td>
<td>410 mg/m³</td>
</tr>
<tr>
<td></td>
<td>OSHA_TRANS</td>
<td>PEL</td>
<td>410 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Z1A</td>
<td>TWA</td>
<td>410 mg/m³</td>
</tr>
</tbody>
</table>

**Eye protection:** Chemical resistant goggles must be worn. Eye protection worn must be compatible with respiratory protection system employed.

**Hand protection:** Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): butyl-rubber Rinse and remove gloves immediately after use. Wash hands with soap and water. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. NOTE: Material is a possible skin sensitizer. Reference: Methacrylate Producers Association, Inc., "Chemical-Protective Gloves for Methacrylic Acid and its Esters", September 1998.

**Skin and body protection:** Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

**Respiratory protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator’s use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 50 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) full-face piece, air-purifying respirator, OR full-face piece, airline respirator in the pressure demand mode. Above 50 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters. NOTE: Contact Rohm and Haas Company for air monitoring method.

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Engineering measures:** Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100 ft./min (0.5 m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

<table>
<thead>
<tr>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid clear</td>
</tr>
</tbody>
</table>
**Color**
colorless  
**Odor**
Fruity odor  
**Boiling point/boiling range**  
101 °C (213.80 °F)  
**Melting point/range**  
-48.00 °C (-54.40 °F)  
**Flash Point**  
8 °C (46 °F) SETAFLASH CLOSED CUP  
**Ignition temperature**  
435 °C (815.00 °F)  
**Lower explosion limit**  
2.10 %(V)  
**Upper explosion limit**  
12.50 %(V)  
**Vapor pressure**  
29.0 mmHg at 20 °C (68.00 °F)  
**Relative vapor density**  
3.5  
**Water solubility**  
15.00000 g/l at 0.00 °C (32.00 °F)  
**Relative density**  
0.93  
**Viscosity, dynamic**  
0.530 mPa.s at 25 °C (77 °F)  
**Evaporation rate**  
>1.00  
**Percent volatility**  
100 %

**SECTION 10: STABILITY AND REACTIVITY**

**Hazardous reactions**
Inhibitor is added to this product to prevent polymerization. However, this material can undergo hazardous polymerization. See Hazardous Polymerization for conditions to avoid. This material is considered stable under specified conditions of storage, shipment and/or use. See SECTION 7, Handling And Storage, for specified conditions.

**Materials to avoid**
Avoid contact with the following: Acids Bases, Oxidizing agents, Reducing agents, UV light, free radical initiators, organic peroxides

**Hazardous decomposition products**
There are no known hazardous decomposition products for this material.

**Polymerization**
Excessive aging, heat, contamination with polymerization catalysts, oxygen-free atmosphere, inhibitor depletion or ultraviolet light (sunlight) may cause polymerization. An uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**
LD50 rat > 5,000 mg/kg

**Acute inhalation toxicity**
LC50 rat 4 h 7094 ppm

**Acute dermal toxicity**
LD50 rabbit > 5,000 mg/kg

**Skin irritation**
rabbit Moderate irritation.

**Eye irritation**
rabbit slight irritation
Sensitization
May cause sensitization by skin contact.

Teratogenicity
MMA did not cause birth defects, malformations, or fetal toxicity in pregnant rats inhaling concentrations up to 2028 ppm.

Mutagenicity
Methyl methacrylate has produced mutations and chromosomal aberrations in certain in-vitro assays using cultured mammalian cells. However, there is no convincing evidence for in-vivo clastogenicity of methyl methacrylate. In several lifetime animal studies, methyl methacrylate has been shown to be non-carcinogenic.

In a retrospective study of the effects of exposure to ethyl acrylate and methyl methacrylate on workers hired in one plant between 1933 and 1945, a higher-than-expected incidence of colorectal cancer mortality was observed. However, there was no association of risk in similarly exposed populations from other locations or in subsequent evaluations of the same location.

SECTION 12: ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
Biodegradability
Ultimately biodegradable (88% within 28 days) under aerobic conditions

Physico-chemical removability
28-Day Hydrolysis Study: Rapidly hydrolyzed under alkaline conditions.

Stability in soil
Adsorption/Desorption: Very highly mobile, not adsorbed to soil

Ecotoxicity effects
Toxicity to fish
LC50 Oncorhynchus mykiss (rainbow trout) 96 h > 79 mg/l

Toxicity to algae
EC50 Algae (Selenastrum capricornutum) 72 h 170 mg/l

Toxicity to aquatic invertebrates
EC50 Daphnia magna 48 h 69 mg/l

SECTION 13: DISPOSAL CONSIDERATIONS

Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. Do not allow material to contaminate ground water system.

Disposal
Waste Classification: 40 CFR 261.30 - .38 - Listed Waste U162
After the addition of excess inhibitor, incinerate liquid and contaminated diking material in accordance with local, state, and federal regulations.

Contaminated packaging: Dispose of as unused product. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied. Do not burn, or use a cutting torch on, the empty drum. Pursue safe, legal methods for recycle of empty containers. Improper disposal or re-use of this container may be dangerous and illegal. Refer to applicable local, state and federal regulations.
SECTION 14: TRANSPORTATION INFORMATION

DOT
Proper shipping name: Methyl methacrylate monomer, stabilized
UN-Number: UN 1247
Class: 3
Packing group: II
Reportable Quantity: Methyl methacrylate

IMO/IMDG
Proper shipping name: Methyl methacrylate monomer, stabilized
UN-Number: UN 1247
Class: 3
Packing group: II

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.

SECTION 15: REGULATORY INFORMATION

Workplace Classification
OSHA: This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

WHMIS: This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III: Section 311/312 Categorizations (40CFR370): Acute Health Hazard
Chronic Health Hazard
Fire Hazard
Reactivity Hazard

SARA TITLE III: Section 313 Information (40CFR372)
This product contains a chemical which is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: (Quantity present is found elsewhere on this MSDS.)
SARA Title III Components: Methyl methacrylate 80-62-6

CERCLA Information (40CFR302.4)
This material is regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. This material is or contains chemical(s) listed in 40 CFR Table 302.4 or nondesignated RCRA ICR substance(s). (Nondesignated ICR substances apply to materials that will not be reused.) The Reportable Quantity(s) (RQ) are listed below. Releases in excess of its reportable quantity must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Methyl methacrylate 80-62-6 1,000 lbs RQ

US. Toxic Substances Control Act (TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Hazard Rating: Health: 2* ; Fire: 3; Reactivity: 2  
* = Chronic Effects (See Hazards Identification)

SECTION 16: OTHER INFORMATION

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. MATRIX CHEMICAL, LLC MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREIN. Matrix Chemical will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.