

SAFETY DATA SHEET



Date Prepared : 6/26/2012
 MSDS No : MRO Solution 34 - GHS
 Date-Revised : 5/13/2015
 Revision No : 4

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: MRO Solution 34 - 40400, 40401, 40402

MANUFACTURER

MRO Solutions L.L.C.
 5645 West Howard Street
 Niles, IL 60714
Service Number: (847) 588-2480

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC: (800) 424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2
 Eye Irritation, Category 2
 Skin Sensitization, Category 1
 Respiratory Tract Irritation, Category 3

GHS LABEL ELEMENTS



Exclamation
 mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation.
 H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)

Prevention:

P271: Use only outdoors or in a well-ventilated area.
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P272: Contaminated work clothing should not be allowed out of the workplace.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.

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P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P362: Take off contaminated clothing and wash before reuse.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
 P405: Store locked up.

Disposal:

7944L5O1: Dispose of in a manner consistent with federal, state, and local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Methacrylate monomer	30 - 50	25852-47-5
2-HYDROXYETHYL METHACRYLATE	10 - 25	868-77-9
Polyethylene glycol ester	10 - 25	18268-70-7
Fumed Silicas	1 - 5	68909-20-6
CUMENE HYDROPEROXIDE	1 - 3	80-15-9

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INGESTION: If swallowed, do not induce vomiting. Do not give anything to drink. Obtain immediate medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Causes skin irritation. Allergic reactions are possible.

SKIN ABSORPTION: Remove contaminated clothing and wash affected areas with soap and water. Prolonged or repeated contact can cause dermatitis in sensitive individuals. Contact a physician if irritation persists.

INGESTION: Slight to very low toxicity.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

ACUTE TOXICITY: Irritating to skin. May cause allergic skin reaction with prolonged contact.

CHRONIC EFFECTS: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not Flammable

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- EXTINGUISHING MEDIA:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- HAZARDOUS COMBUSTION PRODUCTS:** Carbon Dioxide, Carbon Monoxide and other toxic or irritating compounds may form when heated to decomposition.
- EXPLOSION HAZARDS:** None known.
- FIRE FIGHTING PROCEDURES:** Firefighters should wear self-contained breathing apparatus and protective clothing.
- FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.
- FIRE EXPLOSION:** None known.
- SENSITIVE TO STATIC DISCHARGE:** None known.
- SENSITIVITY TO IMPACT:** None known.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Monoxide, carbon dioxide and unknown fumes.

6. ACCIDENTAL RELEASE MEASURES

- SMALL SPILL:** Absorb liquid and place in sealed container for disposal.
- LARGE SPILL:** Contain spill with dike to prevent entry into sewers. Absorb liquid and place in sealed container for disposal.
- ENVIRONMENTAL PRECAUTIONS**
- WATER SPILL:** Avoid runoff into storm sewers and ditches which lead to waterways.
- LAND SPILL:** No data available on this product.
- AIR SPILL:** No data available on this product.
- SPECIAL PROTECTIVE EQUIPMENT:** Use Vinyl latex gloves, chemical splash goggles or safety glasses with side shields.

7. HANDLING AND STORAGE

- GENERAL PROCEDURES:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing.
- HANDLING:** Avoid contact with skin and eyes. Wash thoroughly after handling.
- STORAGE:** Store in a cool place in original container and protect from sunlight. Keep away from sources of ignition.
- STORAGE TEMPERATURE:** Suggested storage conditions: Less than 77F/25C. Protect from freezing.
- LOADING TEMPERATURE:** No data available on this product.
- LOADING/UNLOADING VISCOSITY:** No data available on this product.
- STORAGE PRESSURE:** No data available on this product.
- SPECIAL SENSITIVITY:** None known.
- ELECTROSTATIC ACCUMULATION HAZARD:** None known.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Fumed Silicas	TWA		6 mg/m ³		10 mg/m ³		3 mg/m ³

ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

SKIN: Vinyl or rubber gloves.

RESPIRATORY: This material does not have established exposure limits. Wear a positive pressure air-supplied respirator in situations where there may be potential for airborne exposure.

PROTECTIVE CLOTHING: Wear protective clothing. Launder contaminated clothing before reuse.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Paste

ODOR: Mild odor.

ODOR THRESHOLD: Not Established

APPEARANCE: Purple liquid.

COLOR: Purple.

pH: Not Applicable

PERCENT VOLATILE: Not Established

FLASHPOINT AND METHOD: > 93°C (200°F) Pensky-Martens CC

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: < 5 mmHg

VAPOR DENSITY: No data available on this product.

BOILING POINT: > 149°C (300°F)

FREEZING POINT: No data available on this product.

MELTING POINT: No data available on this product.

POUR POINT: No data available on this product.

THERMAL DECOMPOSITION: No data available on this product.

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE: Not Established

DENSITY: Not Established

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SPECIFIC GRAVITY: 1.05
VISCOSITY #1: 9000 to 20000 Centipoise
(VOC): 31.000 %
COEFF. OIL/WATER: No data available on this product.

10. STABILITY AND REACTIVITY

STABLE: Yes
HAZARDOUS POLYMERIZATION: No
STABILITY: Stable.
POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Avoid temperatures exceeding 100F/38C and incompatible materials.
POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous reactions are possible when exposed to incompatible materials.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide and other toxic or irritating compounds may form when heated to decomposition.
INCOMPATIBLE MATERIALS: Strong acids and alkalis, reactive metals and strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

NOTES:

<u>INGREDIENT</u>	<u>LD50 and LC50 data</u>	<u>IMMEDIATE & DELAYED HEALTH EFFECTS</u>
Methacrylate monomer	Not established	Allergen, Irritant
Hydroxyethyl methacrylate	Not established	Allergen, Irritant
Polyethylene glycol ester	Not established	Irritant
Fumed silicas	Not established	Irritant
Cumene hydroperoxide	Not established	Allergen, CNS, corrosive, Irritant
(contains Cumene, CAS 98-82-8, <0.1%)	Oral LD50 rat = 1,400 mg/kg; Inhalation LC50 rat, 4 hr = 8000ppm	CNS, Irritant, Lung IARC Group 2B carcinogen

EYE EFFECTS: Moderately irritating to eyes and skin.

SKIN EFFECTS: Irritating to skin. May cause allergic skin reaction with prolonged contact.

CHRONIC: Repeated exposure may cause skin sensitization.

SUBCHRONIC: Not yet Known

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CARCINOGENICITY

IARC: No data available on this product.

NTP: No data available on this product.

OSHA: No data available on this product.

IRRITATION: May cause eye irritation, skin irritation and irritation of respiratory tract.

CORROSIVITY: None known.

SENSITIZATION: May cause sensitization by skin contact.

NEUROTOXICITY: No data available on this product.

GENETIC EFFECTS: No data available on this product.

REPRODUCTIVE EFFECTS: No data available on this product.

TARGET ORGANS: May cause sensitization by skin contact.

TERATOGENIC EFFECTS: No data available on this product.

MUTAGENICITY: No data available on this product.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No known ecological affects of cured product.

ECOTOXICOLOGICAL INFORMATION: No data available on this product.

BIOACCUMULATION/ACCUMULATION: No data available on this product.

AQUATIC TOXICITY (ACUTE): No data available on this product.

CHEMICAL FATE INFORMATION: No data available on this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not restricted

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Not restricted

AIR (ICAO/IATA)

SHIPPING NAME: Not restricted

VESSEL (IMO/IMDG)

SHIPPING NAME: Not restricted

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not restricted

15. REGULATORY INFORMATION

UNITED STATES

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SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Section 313: Cumene hydroperoxide (CAS 80-15-9), less than 3%.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
CUMENE HYDROPEROXIDE	1 - 3	80-15-9

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Contains Cumene hydroperoxide (CAS 80-15-9), less than 3%.

Chemical Name	Wt.%	CERCLA RQ
CUMENE HYDROPEROXIDE	1 - 3	10

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Methacrylate monomer	25852-47-5
2-HYDROXYETHYL METHACRYLATE	868-77-9
Polyethylene glycol ester	18268-70-7
Fumed Silicas	68909-20-6
CUMENE HYDROPEROXIDE	80-15-9

TSCA STATUS: All components are listed on or are exempt from listing on the Toxic Substances Control Act.

CALIFORNIA PROPOSITION 65: WARNING: This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Cumene hydroperoxide (CAS 80-15-9) which contains Cumene (CAS 98-82-8), at a level of <0.1%.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic

WHMIS CLASS: D2B - Toxic (Irritant)

16. OTHER INFORMATION

TITLE: Regulatory Affairs Manager

PREPARED BY: Mary Robles **Date-Revised:** 5/13/2015

REVISION SUMMARY: This MSDS replaces the 1/30/2015 MSDS. Revised: **Section 1:** PREPARED BY.

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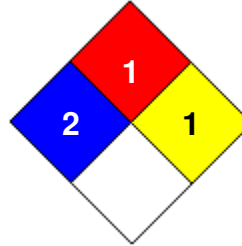


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HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY		1
PHYSICAL HAZARD		1
PERSONAL PROTECTION		B

NFPA CODES



HMIS RATINGS NOTES: Safety glasses and gloves are recommended for usage.

MANUFACTURER DISCLAIMER:

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