

SAFETY DATA SHEET



Date Prepared : 2/24/2015
 MSDS No : MRO Solution 22 - GHS
 Date Revised : 5/13/2015

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: MRO Solution 22 - 40204, 40205, 40206, 41501

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 Corrosion, Category 1A
 Skin Sensitization, Category 1
 Target Organ Toxicity - Single Exposure (Respiratory), Category 3
 Acute Toxicity (Inhalation), Category 4

GHS LABEL ELEMENTS



Corrosion



Exclamation
 mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.
 H317: May cause an allergic skin reaction.
 H332: Harmful if inhaled.
 H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT(S)

Prevention:

P271: Use only outdoors or in a well-ventilated area.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P264: Wash skin and hands thoroughly after handling.

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.
 P310: Immediately call a POISON CENTER or doctor/physician.

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P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P363: Wash contaminated clothing before reuse.
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.

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 ester	40 - 60	
2-HYDROXYETHYL METHACRYLATE	15 - 30	25852-47-5
Acrylic acid	5 - 10	79-10-7
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 wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms reoccur. Wash clothing before reuse.

INGESTION: Do Not induce vomiting. Contact physician at once.

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 serious eye damage.

SKIN: Causes severe skin burns.

SKIN ABSORPTION: None known.

INGESTION: Can burn mouth, throat and stomach.

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

ACUTE TOXICITY: Causes severe skin burns and eye damage.

CHRONIC EFFECTS: May cause skin sensitization.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not Flammable

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

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when heated to decomposition.

EXPLOSION HAZARDS: Containers may rupture violently under fire temperatures. Cool containers with water if exposed to fire conditions.

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: Not Applicable.

SENSITIVITY TO IMPACT: Not Applicable.

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: Prevent from entering into soil, ditches, sewers, waterways and/or ground water. See Section 12, Ecological Information.

AIR SPILL: No data available on this product.

SPECIAL PROTECTIVE EQUIPMENT: Wear a self-contained breathing apparatus and appropriate personal protective equipment. (See Exposure Controls/Personal Protection Section).

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

ENGINEERING CONTROLS:

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<u>CHEMICAL</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Methacrylate ester	Not established	Not established
2-Hydroxyethyl methacrylate	Not established	Not established
Acrylic acid	Not established	2 ppm
Cumene hydroperoxide*	Not established	Not established
*(contains Cumene, CAS 98-82-8, <0.1%)	50 ppm	50 ppm

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: If ventilation is not adequate, wear NIOSH approved respiratory protection.

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

WORK HYGIENIC PRACTICES: Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Low odor.

ODOR THRESHOLD: Not Established

APPEARANCE: Green liquid.

COLOR: Green

pH: No data available on this product.

PERCENT VOLATILE: Not Established

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

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Available

VAPOR PRESSURE: < 5 mm Hg

VAPOR DENSITY: Not Established

BOILING POINT: > 149°C (300°F)

FREEZING POINT: Not Established

MELTING POINT: Not Established

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THERMAL DECOMPOSITION: Not Established
SOLUBILITY IN WATER: Insoluble
EVAPORATION RATE: Not Established
SPECIFIC GRAVITY: ~ 1.1
VISCOSITY: Paste
(VOC): < 3.000 %
COEFF. OIL/WATER: No data available on this product.

10. STABILITY AND REACTIVITY

STABLE: Yes
HAZARDOUS POLYMERIZATION: No
STABILITY: Stable.
POLYMERIZATION: May occur upon depletion of inhibitor.
CONDITIONS TO AVOID: Avoid temperatures exceeding 100F/38C and avoid contact with metal powders, metal salts and amines.
POSSIBILITY OF HAZARDOUS REACTIONS: Under normal conditions of storage and use, hazardous reactions will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide and other toxic or irritating compounds may form when heated to decomposition.
INCOMPATIBLE MATERIALS: Oxidizers, metal salts, heat, inert gases and amines.

11. TOXICOLOGICAL INFORMATION

ACUTE

NOTES:

<u>CHEMICAL</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA carcinogen</u>	<u>LD50 oral rat</u>	<u>LC50 inhalation</u>	<u>LD50 dermal</u>	<u>Health Effect /Target Organs</u>
Methacrylate ester	No	No	No	No data	No data	No data	Irritant / eye, skin, respiratory
2-Hydroxyethyl methacrylate	No	No	No	No data	No data	No data	Irritant / eye, skin, respiratory
Acrylic acid	Group 3	No	No	(mouse) 830 mg/kg	(rat) – 4 hr >5,100 mg/m ³	No data	Corrosive, / skin, eyes Irritant / respiratory
Cumene hydroperoxide*	No	No	No	No data	No data	No data	Corrosive / skin, eyes Aspiration hazard

*(contains Cumene, CAS 98-82-8, <0.1%) – IARC = Group 2B

EYE EFFECTS: Moderately irritating to eyes and skin.

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

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CHRONIC: No data available on this product.

SUBCHRONIC: No data available on this product.

CARCINOGENICITY

IARC: None known.

NTP: None known.

OSHA: None known.

IRRITATION: No data available on this product.

CORROSIVITY: No data available on this product.

SENSITIZATION: May cause sensitization by skin contact.

NEUROTOXICITY: None known.

GENETIC EFFECTS: No data available on this product.

REPRODUCTIVE EFFECTS: No data available on this product.

TARGET ORGANS: See chart - Acute notes.

TERATOGENIC EFFECTS: No data available on this product.

MUTAGENICITY: No data available on this product.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Prevent product from entering drains or sewers in case of spill.

ECOTOXICOLOGICAL INFORMATION: No data available on this product.

BIOACCUMULATION/ACCUMULATION: No data available on this product.

Notes: 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

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UNITED STATES

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)

Chemical Name	Wt.%	CERCLA RQ
Acrylic acid	5 - 10	5,000
CUMENE HYDROPEROXIDE	1 - 3	10

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
2-HYDROXYETHYL METHACRYLATE	25852-47-5
Acrylic acid	79-10-7
CUMENE HYDROPEROXIDE	80-15-9

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

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



Corrosive

WHMIS CLASS: Class E - Corrosive

16. OTHER INFORMATION

TITLE: Regulatory Affairs Manager

PREPARED BY: Mary Robles **Date Prepared:** 2/24/2015 **Date Revised:** 5/13/2015

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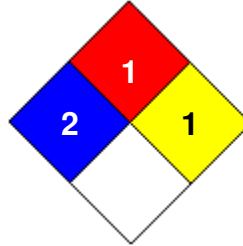
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HMIS RATING

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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