

SAFETY DATA SHEET



Date Prepared : 11/19/2014
MSDS No : MRO Solution 11 - GHS
Date-Revised : 5/13/2015
Revision No : 2

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: MRO Solution 11 - 40103, 40104, 40105

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
Target Organ Toxicity (Single exposure), Category 3
Skin Sensitization, Category 2

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.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P362: Take off contaminated clothing and wash before reuse.
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.

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P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 P312: Call a POISON CENTER or doctor/physician if you feel unwell.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

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	65 - 70	25852-47-5
Bisphenol A Fumarate Resin	20 - 25	39382-25-7
Saccharin	1 - 3	81-07-2
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. Keep individual calm. Get medical attention and show container label.

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

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.

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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: Oxides of carbon and nitrogen.

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: None known.

AIR SPILL: None known.

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: Not Established

LOADING/UNLOADING VISCOSITY: Not Established

STORAGE PRESSURE: Not Established

ELECTROSTATIC ACCUMULATION HAZARD: Not Established

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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: Not Applicable.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling.

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9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Mild odor.
ODOR THRESHOLD: Not Established
APPEARANCE: Red liquid.
pH: Not Applicable
PERCENT VOLATILE: Not Applicable
FLASHPOINT AND METHOD: > 93°C (200°F) Pensky-Martens CC
FLAMMABLE LIMITS: Not Established
AUTOIGNITION TEMPERATURE: Not Established
VAPOR PRESSURE: < 5 mmHg at 27°C (80°F)
VAPOR DENSITY: Not Established
BOILING POINT: > 149°C (300°F)
FREEZING POINT: Not Established
MELTING POINT: Not Established
POUR POINT: Not Established
THERMAL DECOMPOSITION: Not Established
SOLUBILITY IN WATER: Negligible
EVAPORATION RATE: Not Established
DENSITY: Not Established
SPECIFIC GRAVITY: 1.12
VISCOSITY #1: 300 to 500 Centipoise
(VOC): 146.000 g/L

10. STABILITY AND REACTIVITY

STABLE: Yes
HAZARDOUS POLYMERIZATION: No
STABILITY: Stable.
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.
COMMENTS: REACTIVITY: product may react if exposed to amines, inert gases, metallic salts, heat sources or oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

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NOTES:

<u>INGREDIENT</u>	<u>LD50 and LC50 data</u>	<u>IMMEDIATE & DELAYED HEALTH EFFECTS</u>
Methacrylate monomer	Not established	Allergen, Irritant
Bisphenol A Fumarate Resin	Not established	Allergen, Irritant
Saccharin	Not established	No target organs or effects known
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

CARCINOGENICITY

IARC: None known.

NTP: None known.

OSHA: None known.

Notes: WARNING: This product contains chemicals known to the state of California to cause cancer.

CORROSIVITY: None known.

SENSITIZATION: May cause sensitization by skin contact.

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.

DISTRIBUTION: 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

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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
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate (acute) health and Delayed (chronic) health hazards.

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
Saccharin	1 - 3	81-07-2
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
Saccharin	1 - 3	100
CUMENE HYDROPEROXIDE	1 - 3	10

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Methacrylate monomer	25852-47-5
Bisphenol A Fumarate Resin	39382-25-7
Saccharin	81-07-2
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

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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

IRRITANT

WHMIS CLASS: D2B - Toxic (Irritant)

16. OTHER INFORMATION

TITLE: Regulatory Affairs Manager

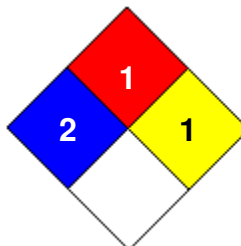
PREPARED BY: Mary Robles **Date-Revised:** 5/13/2015

REVISION SUMMARY: This MSDS replaces the 11/19/2014 MSDS. Revised: **Section 11: ACUTE. Section 15: CALIFORNIA PROPOSITION 65.**

HMIS RATING

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

NFPA CODES



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

MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, MRO Solutions does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.