

Date Prepared : 11/19/2014

MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: 40104 SOLUTION 11 RED 50ML

MANUFACTURER

MRO Solutions L.L.C. 5645 West Howard Street Niles, IL 60714

Service Number: (847) 588-2480

24 HR. EMERGENCY TELEPHONE NUMBERS

MRO Solutions – For Chemical Emergency/Information (847) 588-2480

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2 Eye Irritation, Category 2 Skin Sensitization, Category 1 STOT SE, Category 3 Aquatic, Acute 3

GHS LABEL ELEMENTS

Note: If this product is a consumer product it is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.



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.

H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash skin and hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.



Date Prepared : 11/19/2014 MSDS No : 11790467_PL34505 Date-Revised : 09/18/2017

Revision No: 4

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P362: Take off contaminated clothing.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P337: If eye irritation persists: seek medical attention.

P363: Wash contaminated clothing before reuse.

Storage:

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

P405: Store locked up.

Disposal:

P501: Dispose of in a manner consistent with federal, state, and local regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyethylene Glycol Dimethacrylate	25 - 60	25852-47-5
2-HYDROXYETHYL METHACRYLATE	25 - 35	868-77-9
2,6-di-tert-butyl-p-cresol	1 - 5	128-37-0
Ethylene glycol	1 - 5	107-21-1
Maleic acid	1 - 5	110-16-7
Benzoquinone	1 - 5	106-51-4
Saccharin	1 - 3	81-07-2
Cumene Hydroperoxide	0.8 - 0.9	80-15-9
Cumene	0.02 - 0.155	98-82-8
Acetic Acid	≤ 0 - 0.000183	64-19-7

4. FIRST AID MEASURES

EYES: Immediately flush eyes with large quantities of water for several minutes, while holding eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation or bonding occurs.

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



Date Prepared : 11/19/2014

MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

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 EFFECTS: 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.

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.



Date Prepared : 11/19/2014

MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

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

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)			
EXPOSURE LIMITS			
Тур	Туре		mg/m³
ACGIH TLV	TWA		2
ACGIH TLV	TWA	[1]	100 [1]
OSHA PEL	TWA	0.1	0.4
ACGIH TLV	TWA	0.1	0.44
OSHA PEL	TWA	50	245
OSHA PEL	TWA	50	245
ACGIH TLV	TWA	50	246
OSHA PEL	TWA	10	25
4001117111	TWA	10	25
AUGIH ILV	STEL	15	37
	Typ ACGIH TLV ACGIH TLV OSHA PEL ACGIH TLV OSHA PEL OSHA PEL ACGIH TLV	Type ACGIH TLV ACGIH TLV TWA OSHA PEL TWA ACGIH TLV TWA TWA TWA ACGIH TLV TWA TWA TWA TWA	Type

OSHA TABLE COMMENTS:

1. Aerosol only

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid



Date Prepared : 11/19/2014

MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

ODOR: Mild odor

ODOR THRESHOLD: Not Established

APPEARANCE: Red liquid. **COLOR:** Red colored.

pH: 3 to 6

PERCENT VOLATILE: Not Applicable

FLASHPOINT AND METHOD: > 93°C (200°F)

FLAMMABLE LIMITS: No data available

AUTOIGNITION TEMPERATURE: No data available **VAPOR PRESSURE:** < 5 mmHg at 27°C (80°F)

VAPOR DENSITY: Not Established BOILING POINT: > 148°C (300°F) FREEZING POINT: No data available MELTING POINT: No data available POUR POINT: No data available

THERMAL DECOMPOSITION: Not Established SOLUBILITY IN WATER: Poorly soluble in water.

EVAPORATION RATE: No data available

DENSITY: 1.05 g/cm3

SPECIFIC GRAVITY: No data available

VISCOSITY: No data available

(VOC): < 13 %

10. STABILITY AND REACTIVITY

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 TOXICITY



Date Prepared : 11/19/2014

MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Polyethylene Glycol Dimethacrylate	> 2000 mg/kg		
2-HYDROXYETHYL METHACRYLATE	5564 mg/kg	> 3000 mg/kg	
2,6-di-tert-butyl-p-cresol	890 mg/kg (rat)	> 2000 mg/kg (rat)	
Ethylene glycol	> 5000 mg/kg (rat)	10626 mg/kg (rabbit)	
Maleic acid	2870 mg/kg (rat)	2620 mg/kg (rabbit)	
Benzoquinone	130 mg/kg (rat)		
Cumene Hydroperoxide	382 mg/kg (rat)	133 mg/kg (rabbit)	220 ppm per 4 hr (rat)
Acetic Acid	6190 mg/kg		

SKIN CORROSION/IRRITATION: None known.

RESPIRATORY OR SKIN SENSITISATION: May cause sensitization by skin contact.

CARCINOGENICITY

Chemical Name	IARC Status
2,6-di-tert-butyl-p-cresol	3
Benzoquinone	3
Saccharin	3

IARC: Group 3
OSHA: None known.

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

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

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not restricted

ROAD AND RAIL (ADR/RID)



Date Prepared: 11/19/2014

MSDS No: 11790467_PL34505

Date-Revised: 09/18/2017

Revision No: 4

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
Benzoquinone	1 - 5	106-51-4
Saccharin	1 - 3	81-07-2

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

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

Chemical Name	Wt.%	CERCLA RQ
Benzoquinone	1 - 5	10
Saccharin	1 - 3	100
Cumene Hydroperoxide	0.8 - 0.9	10
Cumene	0.02 - 0.155	5,000
Acetic Acid	≤ 0 - 0.000183	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)



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MSDS No : 11790467_PL34505

Date-Revised : 09/18/2017

Revision No: 4

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2-HYDROXYETHYL METHACRYLATE	868-77-9
2,6-di-tert-butyl-p-cresol	128-37-0
Ethylene glycol	107-21-1
Maleic acid	110-16-7
Benzoquinone	106-51-4
Saccharin	81-07-2
Cumene Hydroperoxide	80-15-9
Cumene	98-82-8
Acetic Acid	64-19-7

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

CALIFORNIA PROPOSITION 65: WARNING: This product can expose you to chemicals including Cumene, which is known to the State of California to cause cancer, and Ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name	Wt.%	Listed
Ethylene glycol	1 - 5	Developmental Toxicity
Cumene	0.02 - 0.155	Cancer

16. OTHER INFORMATION

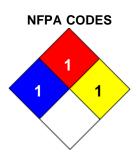
APPROVED BY: Regulatory Affairs Manager

PREPARED BY: Regulatory Affairs Manager Date-Revised: 09/18/2017

REVISION SUMMARY: This MSDS replaces the 06/13/2016 MSDS. Revised: Section 1: MSDS No. Section 2: . Section 15:

CALIFORNIA PROPOSITION 65.





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



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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.