

Material Safety Data Sheet (MSDS)

Section 1: Chemical Product and Company Identification						
Product Name	Epoxy Resin 90% (UVR-6110) 3,4-Epoxy cyclohexylmethyl-3,4					
CAS Number	2386-87-0					
Chemical Formula	C14H20O4					
Company Name	CAMACHEM (Part of CAMAL Group) 3F Jinlong East Beijing Station Road Chaoyang District, Beijing, China					
Contact	sales@camachem.com					
Company Website	www.camachem.com					
Section 2: Composition and Information on Ingredients						
Principle Hazardous Component(s)	Cas #	%W/W	OSHA PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC
7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester	(2386-87-0)	≥87 ≤92	NE	NE	ND	ND
Soluble Oligomer	NA	≥0 ≤0.1	NE	NE	ND	ND
Monoexpoxides of 3-cyclohexenylmethyl-3-cyclohexene carboxylate	NA	≥3 ≤9	NE	NE	ND	ND
3-Cyclohexene-1-carboxylic acid, 3-cyclohexen-1-ylmethly ester	NA	≥0.05 ≤0.3	NE	NE	ND	ND

Section 3: Hazards Identification

3.1 Emergency Overview

Appearance: Liquid

May be harmful if swallowed. Further Information is given in Section 11

3.2 Potential environmental effects

See Ecological Information (Section 12)

Section 4: First Aid Measures

4.1 General

In all cases of doubt, or when symptoms persist, seek medical attention.

4.2 If accidental overexposure is suspected

Eye Contact

In case of contact with eyes, flush with copious amount of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin Contact

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if irritation persists.

Inhalation

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Ingestion

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Notes to Physician

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5: Fire and Explosion Data

Flash Point: 245 °F (118 °C), Method: Closed cup ASTM D93.

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media:



Contact: sales@camachem.com

Water fog or fine spray. Carbon dioxide extinguishers, dry chemical powder extinguishers, or appropriate foam.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Do not direct a solid stream of water at burning material as spattering may result.

Unusual Fire and Explosion Hazards:

Emits toxic fumes under fire conditions. Container explosion may occur under fire conditions.

Hazardous combustion products:

Toxic fumes, carbon dioxide, carbon monoxide and phenolics.

DOT Class: Not regulated.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

Waste Disposal Methods:

Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be Taken in Handling and Storage:

Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Keep tightly closed.

Storage temperature: Ambient temperature.

Storage Pressure: NA

Section 8: Exposure Controls/Personal Protection

Engineering Controls

Ventilation required: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

Personal Protection Equipment

Respiratory protection: No respiratory protection should be needed

Protective gloves: Wear chemical-resistant gloves.

Skin protection: Wear protective clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

**CAMACHEM (Part of CAMAL Group), 3F Jinlong East Beijing Station Road
Chaoyang District, Beijing, China**
www.camachem.com

Eye protection: Wear safety goggles.

Additional clothing and/or equipment: NIF

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9: Physical and Chemical Properties

Appearance and Physical State:	Liquid.
Odor (threshold):	Odorless
Specific Gravity (H₂O=1):	1.160---1.175 g/cm ³
Vapor Pressure (mm Hg):	<0.01 mm Hg at 20°C
VOC	0.00g/L
Vapor Density (air=1) :	9
Percent Volatile by volume:	ND
Evaporation Rate (butyl acetate=1):	ND
Boiling Point:	ND
Freezing point / melting point:	-37°C
pH:	ND
Solubility in Water:	< 0.1% (by weight)
Molecular Weight:	252.31 AMU
Partition Coefficient:	Log Kow: 1.34

Section 10: Stability and Reactivity Data

Stability:	Stable
Conditions to Avoid:	Incompatible materials.
Materials to Avoid (Incompatibility):	Amines, acids, bases, oxidizing agents
Hazardous Decomposition Products:	Carbon monoxides, carbon dioxides
Hazardous Polymerization:	Will not occur

Section 11: Toxicological Information

Developmental Toxicity:

Did not cause birth defects in laboratory animals.

Reproductive Toxicity:

Limited data in laboratory animals suggest that the material does not affect reproduction.



Contact: sales@camachem.com

Chronic toxicity and carcinogenicity:

Did not cause cancer in animal skin painting studies.

Genetic toxicology:

In Vitro genetic toxicity studies were negative in some cases and positive in other cases. In vivo animal genetic toxicity studies were negative.

Human experience: NIF

This product does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Section 13: Disposal Considerations

RCRA 40 CFR 261 Classification: Contact a licensed professional waste disposal service to dispose of this material.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transport Information

U.S.D.O.T.

Proper shipping name: None

Non-hazardous for transport.

IATA:

Proper shipping name: None

Non-hazardous for transport..

IMO:

Proper shipping name: None

Section 15: Other Regulatory Information

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Section 302: To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

Section 311/312: Delayed (Chronic) Health Hazard: Yes. Fire Hazard: No. Immediate (Acute) Health Hazard: Yes. Reactive Hazard: Yes. Sudden Release of Pressure Hazard: No

SARA Title III: Section 313: To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

RCRA: To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

TSCA: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory

**CAMACHEM (Part of CAMAL Group), 3F Jinlong East Beijing Station Road
Chaoyang District, Beijing, China**
www.camachem.com



Contact: sales@camachem.com

requirements.

CERCLA: To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

RTECS Number: RN7750000

European Regulations

67/548/EEC: To the best of our knowledge this product does not contain chemicals at levels which require reporting under this statute.

Section 16: Other Information

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we m be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.

**CAMACHEM (Part of CAMAL Group), 3F Jinlong East Beijing Station Road
Chaoyang District, Beijing, China**
www.camachem.com