

Safety Data Sheet acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

1 Identification

- **Product identifier**
- **Trade name:** *EO-97M (10cc syringe)*
- **Product number:** EO-97M
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
EPOXYSET INC.
718 Park East Drive
Woonsocket, RI 02895, USA
Phone: (401) 726-4500
www.epoxyset.com
- **Information department:** Product safety department: msds@epoxyset.com
- **Emergency telephone number:**
Chemtel (US transportation) 1-800-255-3924
International (call collect) +01-813-248-0585

Authorized Distributor

RUDOLPH
BROS. & CO.
ADHERING TO QUALITY
1-800-375-0605 www.rudolphbros.com

2 Hazard(s) identification

- **Classification of the substance or mixture**



Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Epoxy phenol novolac resin
Fatty acids, C18-unstaurated, dimers, polymers with epicholohydrin
- **Hazard statements**
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
- **Precautionary statements**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.
P302+P352 If on skin: Wash with plenty of water.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: EO-97M (10cc syringe)

(Contd. of page 1)

- P321 Specific treatment (see on this label).
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P363 Wash contaminated clothing before reuse.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 1
 Fire = 1
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 1
 Fire = 1
 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

28064-14-4	Epoxy phenol novolac resin	<50%
68475-94-5	Fatty acids, C18-unsaturated, dimers, polymers with epichlorohydrin	<10%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
 Supply fresh air and to be sure call for a doctor.
 In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: *EO-97M (10cc syringe)*

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 - Ensure adequate ventilation.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

7440-22-4	silver	0.3 mg/m ³
28064-14-4	Epoxy phenol novolac resin	30 mg/m ³

· **PAC-2:**

7440-22-4	silver	170 mg/m ³
28064-14-4	Epoxy phenol novolac resin	330 mg/m ³

· **PAC-3:**

7440-22-4	silver	990 mg/m ³
28064-14-4	Epoxy phenol novolac resin	2,000 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - Ensure good ventilation/exhaustion at the workplace.
 - Do not touch Frozen syringes with bare hand. Always use gloves.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - Material must be stored at -40°F (-40 °C) or below to keep it in the frozen state.
- **Requirements to be met by storerooms and receptacles:**
 - Use only in well ventilated areas.
 - The material contains mixed resin and activator that must be kept frozen below -40°F (-40 °C) until it is ready to be used. The material is thawed at room temperature before it is used. Do not expose the material to high heat before it is used because reaction will occur.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: *EO-97M (10cc syringe)*

(Contd. of page 3)

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

- | | |
|------------------------|-----------------|
| Form: | Paste |
| Color: | Silver |
| Odor: | Aromatic |
| Odor threshold: | Not determined. |

pH-value:	Not determined.
------------------	-----------------

· Change in condition

- | | |
|-------------------------------------|--------------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 2,180 °C (35.6 °F) |

(Contd. on page 5)

-US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: *EO-97M (10cc syringe)*

(Contd. of page 4)

· Flash point:	201 °C (393.8 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	7.86799 g/cm ³ (65.65838 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	0.00 % 0.0 g/l / 0.00 lb/gl
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

28064-14-4 Epoxy phenol novolac resin

Oral	LD50	>2,000 mg/kg (rat)
------	------	--------------------

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: *EO-97M (10cc syringe)*

(Contd. of page 5)

Dermal	LD50	>2,000 mg/kg (rabbit)
--------	------	-----------------------

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018


Revision 4

Reviewed on 02/02/2018

Trade name: *EO-97M (10cc syringe)*

(Contd. of page 6)

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1845
· UN proper shipping name	
· DOT, IMDG, IATA	Carbon dioxide, solid
· Transport hazard class(es)	
· DOT, IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	
· IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	-
· EMS Number:	F-C,S-V
· Stowage Category	E
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IATA	
· Remarks:	The shipping designation is for the solid carbon dioxide ("dry ice") used in the packaging to keep the material frozen. There is no hazardous shipping classification for the material itself.
· UN "Model Regulation":	UN 1845 CARBON DIOXIDE, SOLID, 9, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

7440-22-4 silver

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: EO-97M (10cc syringe)

(Contd. of page 7)

· Proposition 65
· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories
· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms


GHS07

· Signal word Warning

· Hazard-determining components of labeling:

Epoxy phenol novolac resin

Fatty acids, C18-unsaturated, dimers, polymers with epichlorohydrin

· Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves.

P302+P352 If on skin: Wash with plenty of water.

P321 Specific treatment (see on this label).

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

(Contd. on page 9)

-US

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/19/2018

Revision 4

Reviewed on 02/02/2018

Trade name: EO-97M (10cc syringe)

(Contd. of page 8)

· **Department issuing SDS:** Environment protection department.

· **Contact:** Mr. Patel

· **Date of preparation / last revision** 04/19/2018 / 3

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

· *** Data compared to the previous version altered.**

US

Authorized Distributor



1-800-375-0605 www.rudolphbros.com