



55 W.L. Runnels Industrial Drive; Hattiesburg, MS 39401

SAFETY DATA SHEET

1. Identification

Product Name	Epoxy cyclohexyl POSS® Cage Mixture
Product Number	EP0408.01.50 (Previously EP3F08.07)
Synonyms	NA
CAS Number	NA
Product Use	Various
Manufacturer	Hybrid Plastics, Inc. 55 Runnels Dr Hattiesburg, MS 39401 US
Telephone	+1.601.544.3466
Emergency Telephone	US & Canada: 1.800.255.3924 International: +01.813.248.0585

2. Hazards Identification

GHS Classification

Flammable Liquid	(Category 3)
Reproductive Toxicity	(Category 1B)
Acute Aquatic Toxicity	(Category 3)

GHS Label Elements



Signal Word Danger

Hazard Statement(s)

H226 Flammable liquid and vapor
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation
H360 May damage fertility or the unborn child
H402 Harmful to aquatic life

Precautionary Statement(s)

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/lighting/equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P273 Avoid release to the environment
P280 Wear protective gloves/eye protection/face protection
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P308 + P313 IF exposed or concerned: Get medical advice/attention
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up
P501 Dispose of contents/container to an approved waste disposal plant

3. Composition/Information on Ingredients

Chemical Identity	CAS#	EC#	Concentration	Impurities
Epoxycyclohexyl Silsesquioxanes	187333-74-0		45 - 55%	None
1-Methoxy-2-propyl acetate	108-65-6	203-603-9	45 -55%	None

4. First Aid Measures**General Advice**

Consult physician. Show safety data sheet to attending physician.

Inhalation

Remove to fresh air. If breathing becomes difficult, seek immediate medical attention.

Skin Contact

Wash off with soap and water.

Eye Contact

Flush eyes with plenty of water.

Ingestion

Do not induce vomiting. Wash out mouth with water if person is conscious. Consult physician.

5. Fire Fighting Measures

Suitable extinguishing media

Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

Unsuitable extinguishing media

Do not use water jet.

Special protective equipment and precaution for fire fighters

Fire fighters exposed to vapors should wear a self-contained breathing apparatus and full protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Flammable liquid and vapor.

Combustion Products

Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include oxides of carbon, silicon and nitrogen

6. Accidental Release Measures

Personal precautions

Exercise appropriate precautions to minimize direct contact with skin or eyes. Avoid breathing vapors or mist. Ensure adequate ventilation. Be aware that vapors can form explosive concentrations and accumulate in low areas. Remove all sources of ignition.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Use suitable absorbent, sweep up, place in bag and hold for disposal. Ventilate area after material pick up is complete.

7. Handling and Storage

Handling precaution

Handle in a fume hood or in properly ventilated area. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Avoid breathing vapors and mists. Keep away from sources of ignition. Utilize measures to prevent build up of electrostatic charge.

Storage precaution

Ambient temperatures in tightly closed containers in well ventilated area. Containers that have been opened must be properly resealed and stored in an upright position to avoid leaks.

8. Exposure Controls/Personal Protection

Control Parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Propylene glycol monomethyl ether acetate	108-65-6	TWA	50 ppm	USA, Workplace Environmental Exposure Levels (WEEL)
		PEL	100 ppm 541 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
	For	Skin		
		STEL	150 ppm 811 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Personal protective equipment

Respiratory protection

Where respiratory protection is required, use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Wash thoroughly after handling.

Eye protection

Wear chemical safety goggles or a face shield

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Use common industrial hygiene practices.

9. Physical and Chemical Properties

Form	Clear Liquid
Color	Colorless
Odor	Not Determined
Vapor Density	Not Determined
Evaporation Rate	Not Determined
Boiling Point	Not Determined
Melting Point	Not Determined
Decomposition Temperature	Not Determined
Reactivity in Water	None
Solubility in Water	Partially Soluble

10. Stability and Reactivity

Chemical stability

Stable under recommended storage conditions.

Conditions/materials to avoid

Exposure to strong bases

Hazardous decomposition products

Carbon dioxide, Carbon monoxide, Silicon Oxides

11. Toxicological Information

Acute toxicity – For propylene glycol monomethyl ether acetate

LD50 Oral – Rat – female – 83532 mg/Kg

LD50 Dermal – Rat – male and female – >2000 mg/Kg

(OECD Test Guideline 402)

Skin corrosion/irritation - For propylene glycol monomethyl ether acetate

Skin – Rabbit

Result – No skin irritation

(OECD Test Guideline 404)

Serious eye damage/eye irritation - For propylene glycol monomethyl ether acetate

Eyes – Rabbit

Result – No eye irritation

Respiratory or skin sensitization - For propylene glycol monomethyl ether acetate

Maximization Test – Guinea Pig

Did not cause sensitization on laboratory animals.

(OECD Test Guideline 406)

Germ cell mutagenicity - For propylene glycol monomethyl ether acetate

Reverse Mutation Assay

S. Typhimurium assay

Result - Negative

Carcinogenicity - For propylene glycol monomethyl ether acetate

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity – repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

12. Ecological Information**Toxicity - For propylene glycol monomethyl ether acetate**

Toxicity to fish mortality LC50 - *Salmo gairdneri* - 100 - 180 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia static test EC50 - *Daphnia magna* (Water flea) - > 500 mg/l - 48 h
and other aquatic
invertebrates

Persistence and degradability

Biodegradability Biotic/Aerobic - Exposure time 28 d
Result: 83 % - Readily biodegradable.
(OECD Test Guideline 301F)

Biochemical Oxygen 0.36 mg/l
Demand (BOD)

Chemical Oxygen 1.74 mg/g
Demand (COD)

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. Disposal Considerations**Product**

Contact a licensed waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport Information

Classification for road and rail transport (ADR/RID)

UN Number: UN1993
Proper Shipping Name: Flammable Liquids, n.o.s.
Technical Name: (1-Methoxy-2-propyl acetate in Silsesquioxane Resin)
Packing Group: III

Classification for sea transport (IMO-IMDG)

Transport Hazard Class: 3
Marine Pollutant: Yes

Classification for air transport (IATA/ICAO)

Transport Hazard Class: 3

15. Regulatory Information

U.S. Federal Regulations: This product is not currently regulated by SARA/EPCRA
TSCA: Not listed. R&D use only
REACH: Not registered

16. Other Information

Reviewed by: Director of Commercial Products

Date prepared: 11.05.2019

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