



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

SAFETY DATA SHEET

1. Identification

Product Name	POSS® Resin EP3112, Part B
Product Number	EP3112B
Synonyms	Tetraethylenepentamine
CAS Number	112-57-2
Product Use	Composites
Manufacturer	Hybrid Plastics, Inc. 55 Runnels Dr. Hattiesburg, MS 39401 US
Telephone	+1.601.544.3466
Fax	+1.601.545.3103
Email	info@hybridplastics.com
Emergency Telephone	US & Canada: 1.800.255.3924 International: +01.813.248.0585

2. Hazards Identification

GHS Classification

Physical hazards

None

Health hazards

Acute toxicity, oral	Classification not possible
Acute toxicity, dermal	Category 4
Acute toxicity, inhalation	Classification not possible
Skin corrosion/irritation	Category 1B
Serious eye damage/irritation	Category 1
Sensitization, respiratory	Category 1
Sensitization, skin	Classification not possible

Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity, single exposure	Classification not possible
Specific target organ toxicity, repeated exposure	Classification not possible
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2
Hazardous to the ozone layer	Classification not possible

GHS Label Elements



Signal Word

Danger

Hazard Statement(s)

H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P261	Avoid breathing fumes.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Don NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair); Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P322	Specific measures (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

NFPA rating: Health: 3 Flammability: 1 Reactivity: 0

HMIS rating: Health: 3 Flammability: 1 Physical Hazard: 0

3. Composition/Information on Ingredients

Chemical Identity	CAS#	EC#	Conc.
Tetraethylenepentamine	112-57-2	203-986-2	100

4. First Aid Measures

Inhalation

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

Skin Contact

Remove contaminated clothing and shoes immediately. Wash off with soap and water.

Eye Contact

Flush eyes with plenty of water for at least 15 minutes. Consult a physician.

Ingestion

If swallowed, do not induce vomiting. Wash out mouth with water if person is conscious.

5. Fire Fighting Measures

Suitable extinguishing media

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

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

None

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 inhalation of vapors.

Environmental precautions

Do not let product enter drains or discharge into the environment.

Methods for cleaning up

Use suitable absorbent, sweep up, place in bag and dispose of as hazardous waste. Ventilate area and wash spill site after material cleanup is complete.

7. Handling and Storage

Handling precaution

Handle in a fume hood or in properly ventilated area. Avoid inhalation of vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage precaution

Store in ambient temperatures in tightly closed containers.

8. Exposure Controls/Personal Protection

Component	CASRN	Value	Control Parameters	Basis
Tetraethylenepentamine	112-57-2	TWA	5.00 mg/m ³	USA (WEEL)

Respiratory protection

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

Appearance	Light yellow, viscous liquid
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting/freezing point	-40 °C (-40 °F)
Initial boiling point and range	340 °C (644°F)

Flash point	163 °C (325°F)
Evaporation rate	No data available
Flammability	No data available
Upper/lower flammability explosive limits	No data available
Vapor pressure	No data available
Vapor density	6.53 (air = 1.0)
Relative density	0.998 gm/cm ³ @ 25 °C (77°F)
Solubility(ies)	Water (s)
Partition coefficient (n-octanol/water)	No data available
Autoignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity	No data available

10. Stability and Reactivity

Chemical stability

Stable under recommended storage conditions

Conditions/materials to avoid

No data available

Hazardous decomposition products

No data available

11. Toxicological Information

Acute toxicity

LD₅₀ Oral – Rat – 3,990 mg/kg

Inhalation: No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.

12. Ecological Information**Toxicity**

Toxicity to fish	LC ₅₀ – <i>Poecilia reticulata</i> (guppy) – 420 mg/l – 96 h
Toxicity to daphnia and Other aquatic invertebrates	EC ₅₀ – <i>Daphnia magna</i> (water flea) – 24 mg/l – 48 h
Toxicity to algae	IC ₅₀ – <i>Pseudokirchneriella subcapitata</i> (green algae) – 2 mg/l – 72 h

Persistence and degradability

No data available

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)**

Proper Shipping Name: Tetraethylenepentamine

UN Number: 2320
Class: 8 Packing Group: III

Classification for sea transport (IMO-IMDG)

Proper Shipping Name: Tetraethylenepentamine
UN Number: 2320
Class: 8 Packing Group: III EMS-No: F-A, S-B
Marine Pollutant: Yes

Classification for air transport (IATA/ICAO)

Proper Shipping Name: Tetraethylenepentamine
UN Number: 2320
Class: 8 Packing Group: III

15. Regulatory Information

SARA 302 Components

Not regulated

SARA 313 Components

Not regulated

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

Tetraethylenepentamine CASRN 112-57-2

Pennsylvania Right To Know Components

Tetraethylenepentamine CASRN 112-57-2

New Jersey Right To Know Components

Tetraethylenepentamine CASRN 112-57-2

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

16. Other Information

Date prepared: 08.06.2015

Reviewed by: Director of Commercial Products

The information and recommendations contained in this Safety Data Sheet are from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. While the above information is believed to be accurate, no warranty, guaranty, or representation is made as to the correctness or sufficiency of the information and the information is intended only as a guide. Hybrid Plastics shall not be held liable for any damage resulting from handling or from contact with this product. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine environmental regulatory compliance obligations under any applicable laws.