



## SAFETY DATA SHEET EPO-TEK® H77S PMF Syringe

### 1. Identification

#### Product identifier

Product name EPO-TEK® H77S PMF Syringe

Product number H77S

#### Recommended use of the chemical and restrictions on use

Application Adhesive.

Uses advised against Use only for intended applications.

#### Details of the supplier of the safety data sheet

Supplier Epoxy Technology, Inc.  
14 Fortune Drive  
Billerica, MA 01821  
USA  
(978) 667-3805  
(978) 663-9782  
www.epotek.com, SDS@epotek.com

#### Emergency telephone number

Emergency telephone ChemTel: +1 (800) 255-3924, +1 (813) 248-0585

### 2. Hazard(s) identification

#### Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

#### Label elements

##### Pictogram



Signal word Danger

Hazard statements  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H412 Harmful to aquatic life with long lasting effects.

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**Precautionary statements**

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P302+P352 If on skin: Wash with plenty of 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.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P342+P311 If experiencing respiratory symptoms: Call a poison center/ doctor.  
 P501 Dispose of contents/ container in accordance with national regulations.

**Contains** Substituted Anhydride, Bisphenol A Diglycidyl Ether Resin, Reactive Diluent, Phthalic Anhydride

### Other hazards

**Hazards not otherwise classified (HNOC)** Contains epoxy constituents. May produce an allergic reaction.

### 3. Composition/information on ingredients

#### Mixtures

<b>Substituted Anhydride</b>	<b>10-30%</b>
CAS number: Proprietary	
<b>Classification</b>	
Eye Dam. 1 - H318	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
<b>Bisphenol A Diglycidyl Ether Resin</b>	<b>10-30%</b>
CAS number: 25085-99-8	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
<b>Reactive Diluent</b>	<b>5-10%</b>
CAS number: Proprietary	
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	

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<b>Phthalic Anhydride</b>	<b>1-5%</b>
CAS number: 85-44-9	
<b>Classification</b>	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
STOT SE 3 - H335	

The full text for all hazard statements is displayed in Section 16.

### 4. First-aid measures

#### Description of first aid measures

<b>Inhalation</b>	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
<b>Skin Contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

#### Most important symptoms and effects, both acute and delayed

<b>Inhalation</b>	May cause an asthma-like shortness of breath. Irritation of nose, throat and airway. Vapors may cause headache, fatigue, dizziness and nausea.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Causes skin irritation. May cause sensitisation by skin contact. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.

#### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically.
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### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Dry chemicals. Foam. Carbon dioxide (CO<sub>2</sub>).

#### Special hazards arising from the substance or mixture

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

#### Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapors. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**      Wear protective clothing as described in Section 8 of this safety data sheet.

#### Environmental precautions

**Environmental precautions**      Avoid release to the environment.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**      Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

**Reference to other sections**      For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**      Handle all packages and containers carefully to minimize spills. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

**Advice on general occupational hygiene**      Provide eyewash station. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse. Use appropriate skin cream to prevent drying of skin.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**      Store at -40°C. Keep container tightly sealed when not in use.

**Storage class**      Chemical storage.

#### Specific end uses(s)

**Specific end use(s)**      The identified uses for this product are detailed in Section 1.

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

#### **Phthalic Anhydride**

Long-term exposure limit (8-hour TWA): ACGIH 1 ppm

Short-term exposure limit (15-minute): ACGIH

ACGIH = American Conference of Governmental Industrial Hygienists.

#### Exposure controls

#### **Protective equipment**



**Appropriate engineering controls**      Provide adequate general and local exhaust ventilation.

**Eye/face protection**      Wear tight-fitting, chemical splash goggles or face shield.

**Hand protection**      It is recommended that chemical-resistant, impervious gloves are worn.

**Other skin and body protection**      Wear appropriate clothing to prevent any possibility of skin contact.

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<b>Hygiene measures</b>	Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	If ventilation is inadequate, suitable respiratory protection must be worn.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Paste.
<b>Color</b>	Grey.
<b>Odor</b>	Mild.
<b>Odor threshold</b>	No specific test data are available.
<b>pH</b>	No specific test data are available.
<b>Melting point</b>	No specific test data are available.
<b>Initial boiling point and range</b>	No specific test data are available.
<b>Flash point</b>	> 93°C
<b>Evaporation rate</b>	< BuAc
<b>Flammability (solid, gas)</b>	No specific test data are available.
<b>Upper/lower flammability or explosive limits</b>	No specific test data are available.
<b>Vapor pressure</b>	No specific test data are available.
<b>Vapor density</b>	> 1
<b>Relative density</b>	No specific test data are available.
<b>Solubility(ies)</b>	Slightly soluble in water.
<b>Partition coefficient</b>	No specific test data are available.
<b>Auto-ignition temperature</b>	No specific test data are available.
<b>Decomposition Temperature</b>	No specific test data are available.
<b>Viscosity</b>	No specific test data are available.
<b>Other information</b>	None.

### 10. Stability and reactivity

<b>Reactivity</b>	The following materials may react violently with the product: Strong oxidizing agents. Strong reducing agents.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	May polymerize.
<b>Conditions to avoid</b>	Avoid excessive heat for prolonged periods of time.
<b>Materials to avoid</b>	Strong oxidizing agents. Strong reducing agents.

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**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg) 5,208.52

##### Acute toxicity - dermal

ATE dermal (mg/kg) 13,522.93

##### Acute toxicity - inhalation

ATE inhalation (gases ppm) 52,707.17

ATE inhalation (vapours mg/l) 135.23

ATE inhalation (dusts/mists mg/l) 18.66

**Inhalation** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Ingestion** May cause discomfort if swallowed.

**Skin Contact** Causes skin irritation. May cause sensitisation by skin contact. May cause an allergic skin reaction.

**Eye contact** Causes serious eye damage.

### 12. Ecological Information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

#### Acute aquatic toxicity

**Acute toxicity - fish** Not available.

#### Persistence and degradability

**Persistence and degradability** No data available.

#### Bioaccumulative potential

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** No specific test data are available.

#### Mobility in soil

**Mobility** The product has poor water-solubility.

#### Other adverse effects

**Other adverse effects** Not known.

### 13. Disposal considerations

#### Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 14. Transport information

## EPO-TEK® H77S PMF Syringe

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**UN Number**

Not applicable.

**UN No. (DOT)** Not applicable.

**UN proper shipping name**

Not applicable.

**Proper shipping name (DOT)** Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**DOT transport labels**

No transport warning sign required.

**Packing group**

Not applicable.

**DOT packing group** Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

No.

**Special precautions for user**

Not applicable.

**DOT reportable quantity** Not applicable.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**Regulatory References** Proprietary information protected pursuant to WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Section 7, Art. 39.

**US Federal Regulations**

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are required to be listed.

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

5,000 lbs (2270 Kg)

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

None of the ingredients are required to be listed.

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### **SARA 313 Emission Reporting**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

### **CAA Accidental Release Prevention**

None of the ingredients are required to be listed.

### **OSHA Highly Hazardous Chemicals**

None of the ingredients are required to be listed.

### **US State Regulations**

#### **California Proposition 65 Carcinogens and Reproductive Toxins**

None of the ingredients are required to be listed.

#### **California Air Toxics "Hot Spots" (A-I)**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

#### **California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are required to be listed.

#### **Massachusetts "Right To Know" List**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

#### **Rhode Island "Right To Know" List**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

#### **Minnesota "Right To Know" List**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

#### **New Jersey "Right To Know" List**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

#### **Pennsylvania "Right To Know" List**

The following ingredients are listed or exempt:

*Phthalic Anhydride*

### **Inventories**

#### **EU - EINECS/ELINCS**

Some of the ingredients are listed or exempt.

#### **Canada - DSL/NDSL**

All the ingredients are listed or exempt.

#### **US - TSCA**

All the ingredients are listed or exempt.

#### **US - TSCA 12(b) Export Notification**

None of the ingredients are listed or exempt.



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### Australia - AICS

Some of the ingredients are listed or exempt.

### Japan - MITI

Some of the ingredients are listed or exempt.

### Korea - KECI

Some of the ingredients are listed or exempt.

### China - IECSC

All the ingredients are listed or exempt.

### Philippines - PICCS

Some of the ingredients are listed or exempt.

## 16. Other information

<b>Revision date</b>	9/14/2018
<b>Revision</b>	1
<b>Hazard statements in full</b>	<p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>

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