

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** TuffRez 235 Polyurethane Coating - Hardener/Side B  
**Version #** 1.0  
**Revision date** 03-Jun-2008  
**Company information** PolySpec  
 6614 Gant Road  
 Houston, TX 77066 US  
**Emergency** Chemtrec (800) 424-9300  
 International (703) 527-3887

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component(s)	CAS #	Percent
P-Chloro-a,a,a-trifluorotoluene	98-56-6	< 40
Non-hazardous and other components below reportable levels		> 60
<b>Composition comments</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	

## 3. HAZARDS IDENTIFICATION

**Emergency overview** Health injuries are not known or expected under normal use. May be ignited by heat, sparks or flames. Flammable/Combustible Material.

### Potential short term health effects

**Eyes** Contact with eyes may cause irritation.  
**Skin** Not expected to be a primary skin irritant.  
**Inhalation** May cause irritation of respiratory tract.  
**Ingestion** Do not ingest. May be harmful if swallowed.

## 4. FIRST AID MEASURES

### First aid

**Eye contact** Flush eyes with water as a precaution. If irritation persists get medical attention.  
**Skin contact** Rinse with water. Get medical attention if irritation develops or persists.  
**Inhalation** Call a physician if symptoms develop or persist. If breathing is difficult, give oxygen.  
**Ingestion** Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. If ingestion of a large amount does occur, seek medical attention.

**General advice** If you feel unwell, seek medical advice (show the label where possible).

## 5. FIRE FIGHTING MEASURES

**Unusual fire & explosion hazards** Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard. Containers may explode when heated.

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

**Fire fighting equipment/instructions** Move containers from fire area if you can do it without risk. In the event of fire, wear self contained breathing apparatus. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from tanks engulfed in flame. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire.

**Flash point** 109 °F (42.8 °C) Pensky-Martens Closed Cup

## 6. ACCIDENTAL RELEASE MEASURES

**Evacuation procedures** Keep unnecessary personnel away. Ventilate closed spaces before entering. Stay upwind. Keep out of low areas.

<b>Containment procedures</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
<b>Personal precautions</b>	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for cleaning up</b>	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Dike far ahead of liquid spill for later disposal. Never return spills in original containers for re-use. Should not be released into the environment.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not handle or store near an open flame, heat or other sources of ignition. Do not breathe gas/fumes/vapor/spray. All equipment used when handling the product must be grounded. Handle and open container with care. Surfaces may become slippery after spillage.
<b>Storage</b>	Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. The pressure in sealed containers can increase under the influence of heat. Use care in handling/storage. Do not freeze.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	No personal respiratory protective equipment normally required.
<b>Eye protection</b>	Avoid contact with eyes.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>General</b>	Structural firefighters protective clothing will only provide limited protection. Wear suitable protective equipment.
<b>Engineering measures to reduce exposure</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>Hygiene measures</b>	When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Density</b>	9.7125 lb/gal
<b>Form</b>	Liquid.
<b>Specific gravity</b>	1.1655

## 10. CHEMICAL STABILITY & REACTIVITY INFORMATION

<b>Stability</b>	Risk of ignition.
<b>Conditions to avoid</b>	High temperatures. Direct sources of heat.
<b>Incompatibility</b>	None known.

## 11. TOXICOLOGICAL INFORMATION

### Component analysis - LD50

#### NIOSH - Selected LD50s and LC50s

P-Chloro-a,a,a-trifluorotoluene 98-56-6 Oral LD50 Rat: 13 g/kg; Oral LD50 Mouse: 11500 mg/kg

**Further information** This product has no known adverse effect on human health.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Components of this product are hazardous to aquatic life.
<b>Environmental effects</b>	Harmful to aquatic life.
<b>Ecotoxicity - Microtox Data</b>	
P-Chloro-a,a,a-trifluorotoluene 98-56-6	5 Min EC50 Photobacterium phosphoreum: 11.1 mg/L; 15 min EC50 Photobacterium phosphoreum: 13.4 mg/L; 30 min EC50 Photobacterium phosphoreum: 14.3 mg/L

## 13. DISPOSAL CONSIDERATIONS

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 F
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations. If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in an approved incinerator. Dispose of this material and its container at hazardous or special waste collection point. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

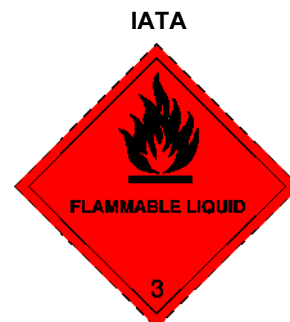
## 14. TRANSPORTATION INFORMATION

### Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

### International Air Transport Association (IATA) Requirements

<b>Proper shipping name</b>	PAINT RELATED MATERIAL
<b>Hazard class</b>	3
<b>Special provisions</b>	B1, B52, IB3, T2, TP1
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	173
<b>Packaging bulk</b>	242
<b>Quantity limits passenger</b>	60 L
<b>Quantity limits cargo</b>	220 L
<b>Vessel stowage location</b>	A
<b>UN number</b>	UN1263
<b>Packaging group</b>	III
<b>Labels required</b>	3
<b>Passenger Cargo Pkg Inst LQ</b>	Y309 309
<b>Packaging Instructions</b>	310
<b>Pkg Inst Cargo Only</b>	



### International Maritime Dangerous Goods (IMDG) Code Requirements

Not regulated as dangerous goods.

## 15. REGULATORY INFORMATION

### US federal regulations

#### Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

P-Chloro-a,a,a-trifluorotoluene 98-56-6 202-681-1

#### Inventory - United States - Section 8(b) Inventory (TSCA)

P-Chloro-a,a,a-trifluorotoluene 98-56-6 Present

### Occupational safety and health administration (OSHA)

**29 CFR 1910.1200** Yes  
**hazardous chemical**

### CERCLA (superfund) reportable quantity

None

### Superfund amendments and reauthorization act of 1986 (SARA)

**Section 302 extremely hazardous substance** No  
**Section 311 hazardous chemical** Yes

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**NFPA ratings**

Health: 1  
Flammability: 2  
Instability: 0

**State regulations****Pennsylvania - RTK (Right to Know) List**

P-Chloro-a,a,a-trifluorotoluene 98-56-6 environmental hazard

**16. OTHER INFORMATION****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

**Issue date**

03-Jun-2008

**MSDS sections updated**

Disposal Considerations: Disposal instructions  
Other Information: Disclaimer