

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** TuffRez 233 Catalyst  
**Version #** 1.0  
**Revision date** 28-Feb-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 |
|---|---|---------|
| Propylene glycol monomethyl ether acetate | 108-65-6  | < 90    |
| Dibutyltin dilaurate                      | 77-58-7   | < 10    |
| <b>Composition comments</b>               | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |         |

## 3. HAZARDS IDENTIFICATION

**Emergency overview** Kidney injury may occur. Harmful in contact with eyes.

Danger of serious damage to health by prolonged exposure. Toxic by inhalation, in contact with skin and if swallowed. May cause breathing disorders and lung damage. May be ignited by heat, sparks or flames. Flammable/Combustible Material. May cause brain and central nervous system damage.

**Potential short term health effects**

**Eyes** Toxic in contact with eyes. Contact may irritate or burn eyes. Eye contact may result in corneal injury.

**Skin** Toxic in contact with skin. Blood disorder may occur after prolonged skin contact. Components of the product may be absorbed into the body through the skin.

**Inhalation** Toxic by inhalation. Blood disorder may occur after prolonged inhalation. May cause breathing disorders and lung damage.

**Ingestion** Toxic if swallowed. Blood disorder may occur after ingestion. Do not ingest.

**Target organs** Central nervous system. Blood. Eyes. Kidney. Liver. Respiratory system. Skin.

**Main symptoms** Chronic exposure to neurotoxins damages the brain and the central nervous system. Liver injury may occur. Kidney injury may occur.

## 4. FIRST AID MEASURES

**First aid**

**Eye contact** Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately. Get medical attention if irritation develops or persists.

**Skin contact** Get medical attention immediately. Remove and isolate contaminated clothing and shoes. Immediately flush skin with running water for at least 20 minutes. For minor skin contact, avoid spreading material on unaffected skin. Wash off immediately with plenty of water. If skin irritation persists, call a physician.

**Inhalation** Call a physician or Poison Control Center immediately. Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, give oxygen. Get medical attention, if needed.

**Ingestion** If material is ingested, immediately contact a physician or poison control center. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Do not use mouth-to-mouth method if victim ingested the substance.

**Notes to physician** Symptoms may be delayed.

**General advice** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required.

## 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Unusual fire &amp; explosion hazards</b> | 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.  |
| <b>Suitable extinguishing media</b>         | Carbon dioxide (CO <sub>2</sub> ). Alcohol foam. Water spray. Polymer foam. Dry chemical powder.   |
| <b>Fire fighting equipment/instructions</b> | 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. Cool containers with flooding quantities of water until well after fire is out. |
| <b>Specific methods</b>                     | In the event of fire, cool tanks with water spray. Water mist may be used to cool closed containers.   |
| <b>Flash point</b>                          | 117 °F (47.2 °C) Pensky-Martens Closed Cup   |

## 6. ACCIDENTAL RELEASE MEASURES

|                                |  |
|--------------------------------|--|
| <b>Evacuation procedures</b>   | 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. Use water spray to reduce vapors or divert vapor cloud drift.              |
| <b>Personal precautions</b>    | Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Ensure adequate ventilation. 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>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. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water. |

## 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. Do not get this material in your eyes, on your skin, or on your clothing. In case of insufficient ventilation wear suitable respiratory equipment. 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. Keep out of the reach of children. Do not freeze. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

|  |   |
|--|---|
| <b>Personal protective equipment</b>           |   |
| <b>Respiratory protection</b>                  | A NIOSH- approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. |
| <b>Hand protection</b>                         | Protective gloves.  |
| <b>Eye protection</b>                          | Wear chemical goggles. Face-shield.   |
| <b>Skin and body protection</b>                | Wear suitable protective clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection.                                 |
| <b>General</b>                                 | Structural firefighters protective clothing will only provide limited protection.   |
| <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. Keep away from food and drink. Avoid contact with the skin and the eyes.                                    |

## 9. PHYSICAL & CHEMICAL PROPERTIES

|                |              |
|----------------|--------------|
| <b>Density</b> | 7.999 lb/gal |
|----------------|--------------|

**Form** Liquid.  
**Specific gravity** 0.96

## 10. CHEMICAL STABILITY & REACTIVITY INFORMATION

**Stability** Risk of ignition.  
**Conditions to avoid** High temperatures. Direct sources of heat.  
**Incompatibility** Strong acids. Strong oxidizing agents. Will form explosive mixtures in air. This product is incompatible with nitrates.

## 11. TOXICOLOGICAL INFORMATION

**Local effects** Toxic by inhalation, in contact with skin and if swallowed. Liver toxicity. Blood disorder may occur after ingestion. Risk of serious damage to eyes. Components of the product may be absorbed into the body through the skin.

### Component analysis - LD50

#### NIOSH - Selected LD50s and LC50s

Propylene glycol monomethyl ether acetate 108-65-6 Oral LD50 Rat: 8532 mg/kg; Dermal LD50 Rabbit: >5 g/kg

**Chronic toxicity** Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury.

**Subchronic toxicity** Kidney injury may occur. Blood disorder may occur after ingestion. Blood disorder may occur after prolonged inhalation. Blood disorder may occur after prolonged skin contact.

**Further information** Symptoms may be delayed.

**Routes of exposure** Inhalation. Skin contact. Ingestion.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

## 13. DISPOSAL CONSIDERATIONS

**Waste codes** D001: Waste Flammable material with a flash point <140 F

**Disposal instructions** 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

Not regulated as dangerous goods.

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

Not regulated as dangerous goods.

**Marine pollutant** Yes

## 15. REGULATORY INFORMATION

### Occupational safety and health administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

### 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 - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**NFPA ratings** Health: 2  
Flammability: 2  
Instability: 0

**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.

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