

1. PRODUCT AND COMPANY IDENTIFICATION

Product name PolySpec IMO Clad - Hardener/Side B
Version # 2.0
Revision date 16-Apr-2007
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
Calcium carbonate	1317-65-3	< 40
Aluminum oxide	1344-28-1	< 20
Pyrimido[1,2-a]azepine, 2,3,4,6,7,8,9,10-octahydro-	6674-22-2	< 2.5
Triethylenetetramine	112-24-3	< 10
Crystalline Silica	14808-60-7	< 1
Non-hazardous and other components below reportable levels		> 40

3. HAZARDS IDENTIFICATION

Emergency overview May cause sensitization by inhalation. Irritating to respiratory system. Danger of serious damage to health by prolonged exposure. Toxic by inhalation, in contact with skin and if swallowed. May cause cancer. May cause breathing disorders and lung damage. Causes skin and eye burns.

Potential short term health effects

- Eyes** Toxic in contact with eyes. This product causes eye burns. Risk of serious damage to eyes.
- Skin** Toxic in contact with skin. Causes skin burns.
- Inhalation** Toxic by inhalation. May cause breathing disorders and lung damage. Irritating to respiratory system. May cause sensitization by inhalation.
- Ingestion** Toxic if swallowed. Do not ingest. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

Target organs Eyes. Respiratory system. Skin.

4. FIRST AID MEASURES

First aid

- Eye contact** Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.
- 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.
- 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. Get medical attention immediately. 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. Keep victim warm. In case of shortness of breath, give oxygen. Keep victim under observation.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Small Fires: Dry chemical, CO₂, water spray or regular foam.

Large Fires: Water spray, fog or regular foam.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk. Do not scatter spilled material with high pressure water streams. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in flame. 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.

Flash point 200 °F (93.3 °C) Pensky-Martens Closed Cup

6. ACCIDENTAL RELEASE MEASURES

Evacuation procedures Ventilate closed spaces before entering. Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material. Stay upwind. Keep out of low areas. Keep unnecessary personnel away.

Containment procedures 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.

Personal precautions Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Ensure adequate ventilation. Use personal protective equipment. 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.

Methods for cleaning up Avoid dust formation. 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.

7. HANDLING AND STORAGE

Handling Do not breathe gas/fumes/vapor/spray. Do not get this material in your eyes, on your skin, or on your clothing. In case of insufficient ventilation wear suitable respiratory equipment. Wear personal protective equipment. Do not handle or store near an open flame, heat or other sources of ignition. Surfaces may become slippery after spillage.

Storage Keep out of the reach of children. Keep container tightly closed. 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. Do not freeze.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)

Aluminum oxide	1344-28-1	10 Mg/m ³ TWA (particulate matter containing no asbestos and < 1% crystalline silica)
Crystalline Silica	14808-60-7	0.05 Mg/m ³ TWA (respirable fraction)

ACGIH - Threshold Limits Values - TLV Basis - Critical Effects

Aluminum oxide	1344-28-1	lung; irritation
Crystalline Silica	14808-60-7	silicosis; lung function; lung fibrosis; cancer

OSHA - Final PELs - Time Weighted Averages (TWAs)

Aluminum oxide	1344-28-1	15 Mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Calcium carbonate	1317-65-3	15 Mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

Personal protective equipment

Respiratory protection 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. In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection Protective gloves.

Eye protection Wear chemical goggles. Face-shield.

Skin and body protection Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear appropriate chemical resistant gloves. Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Wear suitable protective clothing.

General Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Avoid contact with the skin and the eyes.

Engineering measures to reduce exposure Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Hygiene measures Keep away from food and drink. Avoid contact with the skin and the eyes. Handle in accordance with good industrial hygiene and safety practice. Handle in accordance with good industrial hygiene and safety practice for diagnostics. When using do not smoke.

9. PHYSICAL & CHEMICAL PROPERTIES

Density 13.3245 lb/gal
Form Liquid.
Specific gravity 1.599

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability Stable at normal conditions.
Conditions to avoid Direct sources of heat.
Incompatibility Fluorine.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Causes burns.
Local effects Toxic by inhalation, in contact with skin and if swallowed. Irritating to respiratory system.

Component analysis - LD50

NIOSH - Selected LD50s and LC50s

Triethylenetetramine 112-24-3 Oral LD50 Rat: 2500 mg/kg; Oral LD50 Mouse: 1600 mg/kg; Dermal LD50 Rabbit: 805 mg/kg

Sensitization May cause sensitization by inhalation.

Carcinogenicity Cancer hazard.

ACGIH - Threshold Limits Values - Carcinogens

Aluminum oxide 1344-28-1 A4 - Not Classifiable as a Human Carcinogen
Crystalline Silica 14808-60-7 A2 - Suspected Human Carcinogen

NTP (National Toxicology Program) - Report on Carcinogens - Known Carcinogens

Crystalline Silica 14808-60-7 Known Carcinogen

Chronic toxicity Prolonged or repeated exposure may cause lung injury.

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

Disposal instructions Dispose in accordance with all applicable regulations. 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.

15. REGULATORY INFORMATION

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 - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No**NFPA ratings** Health: 3
Flammability: 1
Instability: 0**International regulations****Canada - 2004 NPRI (National Pollutant Release Inventory)**

Aluminum oxide 1344-28-1 Part 1, Group 1 Substance (fibrous form)

Canada - WHMIS - Ingredient Disclosure ListAluminum oxide 1344-28-1 1 % (English Item 44, French Item 195)
Crystalline Silica 14808-60-7 1 % (English Item 1406, French Item 1491)
Triethylenetetramine 112-24-3 0.1 % (English Item 1629, French Item 1669)**State regulations****California - Proposition 65 - Carcinogens List**

Crystalline Silica 14808-60-7 carcinogen, initial date 10/1/88 (airborne particles of respirable size)

Massachusetts - Right To Know ListAluminum oxide 1344-28-1 Present
Calcium carbonate 1317-65-3 Present
Crystalline Silica 14808-60-7 Carcinogen; Extraordinarily hazardous
Triethylenetetramine 112-24-3 Present**New Jersey - Right to Know Hazardous Substance List**Aluminum oxide 1344-28-1 sn 2891
Crystalline Silica 14808-60-7 sn 1660
Triethylenetetramine 112-24-3 sn 1908**Pennsylvania - RTK (Right to Know) List**Aluminum oxide 1344-28-1 Environmental hazard
Calcium carbonate 1317-65-3 Present
Crystalline Silica 14808-60-7 Present as well as its dust
Triethylenetetramine 112-24-3 Present**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** 16-Apr-2007**MSDS sections updated** Hazards Identification: Emergency Overview
Handling and Storage: Handling
Exposure Controls / Personal Protection: Respiratory protection
Disposal Considerations: Disposal instructions
Other Information: Disclaimer