

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	PolySpec 400 Epoxy Coating - Resin/Side A
Version #	1.0
Revision date	23-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
Bisphenol-A-(Epichlorohydrin) polymer	25068-38-6	< 40
Calcium carbonate	1317-65-3	< 40
Crystalline Silica	14808-60-7	< 40
Aromatic Hydrocarbon	64742-95-6	< 2.5
Propylene glycol monomethyl ether	107-98-2	< 10
Non-hazardous and other components below reportable levels		> 10

3. HAZARDS IDENTIFICATION

Emergency overview May cause sensitization by skin contact. Irritating to skin. Harmful in contact with eyes. Danger of serious damage to health by prolonged exposure. May cause cancer. May cause breathing disorders and lung damage. May cause brain and central nervous system damage.

Potential short term health effects

Eyes	Contact may irritate or burn eyes. Eye contact may result in corneal injury.
Skin	Components of the product may be absorbed into the body through the skin. Irritating to skin. May cause sensitization by skin contact.
Inhalation	May cause breathing disorders and lung damage.
Ingestion	Do not ingest.
Target organs	Central nervous system. Eyes. Lungs. Respiratory system. Skin.
Main symptoms	Chronic exposure to neurotoxins damages the brain and the central nervous system.

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	Remove and isolate contaminated clothing and shoes. Immediately flush skin with running water for at least 20 minutes. Get medical attention immediately. 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	Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately. 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	Do not induce vomiting without medical advice. 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. If material is ingested, immediately contact a physician or poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Drink plenty of water.
Notes to physician	Symptoms may be delayed.
General advice	Keep victim warm. In case of shortness of breath, give oxygen. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Keep victim under observation. Take off contaminated clothing and shoes immediately.

5. FIRE FIGHTING MEASURES

Unusual fire & explosion hazards	Runoff to sewer may cause fire or explosion hazard. Containers may explode when heated.
Suitable extinguishing media	Small Fires: Dry chemical, CO ₂ , 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. 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. Do not scatter spilled material with high pressure water streams.
Flash point	350 °F (176.7 °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.
Containment procedures	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike the spilled material, where this is possible.
Personal precautions	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	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 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. Wear personal protective equipment. Avoid contact with eyes. Do not get this material in contact with skin or eyes. Surfaces may become slippery after spillage.
Storage	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 container tightly closed. Keep out of the reach of children. Do not freeze.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

ACGIH - Threshold Limits Values - Short Term Exposure Limits (TLV-STEL)

Propylene glycol monomethyl ether	107-98-2	150 Ppm STEL
-----------------------------------	----------	--------------

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

Crystalline Silica	14808-60-7	0.05 Mg/m ³ TWA (respirable fraction)
Propylene glycol monomethyl ether	107-98-2	100 Ppm TWA

ACGIH - Threshold Limits Values - TLV Basis - Critical Effects

Crystalline Silica	14808-60-7	silicosis; lung function; lung fibrosis; cancer
Propylene glycol monomethyl ether	107-98-2	irritation; anesthesia

OSHA - Final PELs - Time Weighted Averages (TWAs)

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. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection	Wear suitable protective clothing. Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.
General	Structural firefighters protective clothing will only provide limited protection. 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. Handle in accordance with good industrial hygiene and safety practice for diagnostics. Avoid contact with the skin and the eyes. Handle in accordance with good industrial hygiene and safety practice. When using do not smoke.

9. PHYSICAL & CHEMICAL PROPERTIES

Density	13.7476 lb/gal
Form	Liquid.
Specific gravity	1.649

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability	Stable at normal conditions.
Conditions to avoid	Direct sources of heat.
Hazardous polymerization	Will not occur.
Incompatibility	Acids. Fluoride. Fluorine. Powerful oxidizers.

11. TOXICOLOGICAL INFORMATION

Local effects	Risk of serious damage to eyes. Components of the product may be absorbed into the body through the skin. Irritating to skin. May cause sensitization by skin contact.
----------------------	--

Component analysis - LD50

NIOSH - Selected LD50s and LC50s

Aromatic Hydrocarbon	64742-95-6	Oral LD50 Rat: 8400 mg/kg
Bisphenol-A-(Epichlorohydrin) polymer	25068-38-6	Oral LD50 Rat: 11400 mg/kg; Oral LD50 Mouse: 15600 mg/kg
Propylene glycol monomethyl ether	107-98-2	Inhalation LC50 Rat: 10000 mg/kg/5H; Oral LD50 Mouse: 11700 mg/kg; Dermal LD50 Rabbit: 13 g/kg

Sensitization	May cause sensitization by skin contact.
----------------------	--

Carcinogenicity	Cancer hazard.
------------------------	----------------

ACGIH - Threshold Limits Values - Carcinogens

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

Further information	Symptoms may be delayed.
----------------------------	--------------------------

Routes of exposure	Skin contact.
---------------------------	---------------

12. ECOLOGICAL INFORMATION

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

Environmental effects

Ecotoxicity - Freshwater Fish Species Data

Propylene glycol monomethyl ether	107-98-2	96 Hr LC50 rainbow trout: 19202 mg/L; 96 Hr LC50 fathead minnow: 15886 mg/L; 96 Hr LC50 bluegill: 21742 mg/L
-----------------------------------	----------	--

Ecotoxicity - Water Flea Data

Propylene glycol monomethyl ether	107-98-2	96 Hr EC50 water flea: 10457 mg/L
-----------------------------------	----------	-----------------------------------

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.

ERG number 128

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

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

Aromatic Hydrocarbon	64742-95-6	265-199-0
Calcium carbonate	1317-65-3	215-279-6
Crystalline Silica	14808-60-7	238-878-4
Propylene glycol monomethyl ether	107-98-2	203-539-1

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

Aromatic Hydrocarbon	64742-95-6	Present
Bisphenol-A-(Epichlorohydrin) polymer	25068-38-6	XU
Calcium carbonate	1317-65-3	Present
Crystalline Silica	14808-60-7	Present
Propylene glycol monomethyl ether	107-98-2	Present

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 - No
Pressure Hazard - No
Reactivity Hazard - No

NFPA ratings

Health: 2
Flammability: 1
Instability: 0

International regulations

Canada - 2004 NPRI (National Pollutant Release Inventory)

Aromatic Hydrocarbon 64742-95-6 Part 5 Substance

Canada - WHMIS - Ingredient Disclosure List

Crystalline Silica	14808-60-7	1 % (English Item 1406, French Item 1491)
Propylene glycol monomethyl ether	107-98-2	1 % (English Item 1364, French Item 833)

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 List

Calcium carbonate	1317-65-3	Present
Crystalline Silica	14808-60-7	Carcinogen; Extraordinarily hazardous
Propylene glycol monomethyl ether	107-98-2	Present

New Jersey - Right to Know Hazardous Substance List

Crystalline Silica	14808-60-7	sn 1660
Propylene glycol monomethyl ether	107-98-2	sn 1613

Pennsylvania - RTK (Right to Know) List

Calcium carbonate	1317-65-3	Present
Crystalline Silica	14808-60-7	Present as well as its dust
Propylene glycol monomethyl ether	107-98-2	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

23-Jun-2008