1. PRODUCT AND COMPANY IDENTIFICATION

Product name	**PolySpec 710 Epoxy Coating - Hardener/Side B**
Version #	1.0
Revision date	09-Mar-2010
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 diamine, 2-amino-, diether with Propylene	9046-10-0	< 80
N-aminoethyl piperazine	140-31-8	< 40
Phenol, nonyl	84852-15-3	< 20

Composition comments This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

3. HAZARDS IDENTIFICATION

Emergency overview Toxic by inhalation, in contact with skin and if swallowed. 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.
Ingestion	Toxic if swallowed. Do not ingest. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.

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	Move to fresh air. 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. Call a physician or Poison Control Center immediately. Oxygen or artificial respiration 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.
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. Keep victim warm. In case of shortness of breath, give oxygen. Immediate medical attention is required.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Small Fires:

Large Fires: Dry chemical, CO2, water spray or regular foam. Water spray, fog or regular foam.

Fire fighting equipment/instructions	Move containers from fire area if you can do it without risk. 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. Do not scatter spilled material with high pressure water streams.
Flash point	200 °F (93.3 °C) Pensky-Martens Closed Cup

6. ACCIDENTAL RELEASE MEASURES

Evacuation procedures	Stay upwind. Keep out of low areas. Keep unnecessary personnel away. Ventilate closed spaces before entering.
Containment procedures	Prevent entry into waterways, sewers, basements or confined areas. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
Personal precautions	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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. 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 breathe gas/fumes/vapor/spray. In case of insufficient ventilation wear suitable respiratory equipment. Do not get this material in your eyes, on your skin, or on your clothing. 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 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

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

9. PHYSICAL & CHEMICAL PROPERTIES

Density	7.9635 lb/gal
Form	Liquid.
Specific gravity	0.956

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability	Stable at normal conditions.
Conditions to avoid	Direct sources of heat.
Hazardous polymerization	Will not occur.
Incompatibility	Acids. Alcohols. Cresol. Glycol. Isocyanates. Phenol. Strong oxidizing agents. Vinyl acetates. Will form explosive mixtures in air.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Causes burns.

Local effects Toxic by inhalation, in contact with skin and if swallowed.

Component analysis - LD50

NIOSH - Selected LD50s and LC50s

N-aminoethyl piperazine	140-31-8	Oral LD50 Rat: 2140 µL/kg; Dermal LD50 Rabbit: 880 µL/kg
Propylene glycol diamine, 2-amino-, diether with Propylene	9046-10-0	Oral LD50 Rat: 242 mg/kg; Dermal LD50 Rabbit: 360 mg/kg

Routes of exposure Inhalation. Skin contact. Ingestion.

12. ECOLOGICAL INFORMATION

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

Environmental effects

Ecotoxicity - Freshwater Fish Species Data

N-aminoethyl piperazine	140-31-8	96 Hr LC50 fathead minnow: 2190 mg/L (flow-through)

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

Proper shipping name	PAINT
Hazard class	8
Special provisions	B52, IB3, T4, TP1
Packaging exceptions	154
Packaging non bulk	173
Packaging bulk	241
Quantity limits passenger	5 L
Quantity limits cargo	60 L
Vessel stowage location	A
UN number	UN3066
Packaging group	III
Labels required	8
ERG number	153

DOT

International Air Transport Association (IATA) Requirements

Proper shipping name	PAINT RELATED MATERIAL CORROSIVE
Hazard class	8
Special provisions	B52, IB3, T4, TP1
Packaging exceptions	154
Packaging non bulk	173
Packaging bulk	241
Quantity limits passenger	5 L
Quantity limits cargo	60 L
Vessel stowage location	A
UN number	UN3066
Packaging group	III
Labels required	8
Passenger Cargo Pkg Inst	Y818
LQ	818
Packaging Instructions	820
Pkg Inst Cargo Only	

IATA

International Maritime Dangerous Goods (IMDG) Code Requirements

Proper shipping name	PAINT
Hazard class	8
Special provisions	163,
Packaging exceptions	154
Packaging non bulk	173
Packaging bulk	241
Quantity limits passenger	5 L
Quantity limits cargo	60 L
Vessel stowage location	A
Item	C9
UN number	UN3066
Packaging group	III
Labels required	8
Hazard ID	80
Transport Category	3

IMDG

15. REGULATORY INFORMATION

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

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

N-aminoethyl piperazine	140-31-8	205-411-0

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

N-aminoethyl piperazine	140-31-8	Present
Propylene glycol diamine, 2-amino-, diether with Propylene	9046-10-0	XU

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 - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
NFPA ratings	Health: 3 Flammability: 1 Instability: 0

International regulations

Canada - WHMIS - Ingredient Disclosure List

N-aminoethyl piperazine	140-31-8	1 % (English Item 68, French Item 213)

State regulations

Massachusetts - Right To Know List

N-aminoethyl piperazine	140-31-8	Present

New Jersey - Right to Know Hazardous Substance List

N-aminoethyl piperazine	140-31-8	sn 0075

Pennsylvania - RTK (Right to Know) List

N-aminoethyl piperazine	140-31-8	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.
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