

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	TuffRez HF Polyurethane Concrete Filler
Version #	1.0
Revision date	10-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
Crystalline Silica	14808-60-7	< 90
Calcium hydroxide	1305-62-0	< 2.5
Non-hazardous and other components below reportable levels		> 2.5

3. HAZARDS IDENTIFICATION

Emergency overview Harmful in contact with eyes. Danger of serious damage to health by prolonged exposure. May cause cancer. May cause breathing disorders and lung 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.
Inhalation	May cause breathing disorders and lung damage.
Ingestion	Do not ingest.
Target organs	Eyes. Lungs. 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. 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	Get medical attention 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	Keep victim warm. Keep victim under observation. 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.

5. FIRE FIGHTING MEASURES

General fire hazards	Not a fire hazard.
Suitable extinguishing media	Small Fires: Dry chemical, CO ₂ , water spray or regular foam. Large Fires: Water spray, fog or regular foam.

6. ACCIDENTAL RELEASE MEASURES

Evacuation procedures	Stay upwind. Keep out of low areas. Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.
Containment procedures	Prevent entry into waterways, sewers, basements or confined areas.
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.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods for cleaning up	Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation.

7. HANDLING AND STORAGE

Handling	Do not breathe gas/fumes/vapor/spray. Wear personal protective equipment. Handle and open container with care. Surfaces may become slippery after spillage.
Storage	Keep container tightly closed. Keep out of the reach of children. Use care in handling/storage. Do not freeze.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

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

Calcium hydroxide	1305-62-0	5 Mg/m ³ TWA
Crystalline Silica	14808-60-7	0.05 Mg/m ³ TWA (respirable fraction)

ACGIH - Threshold Limits Values - TLV Basis - Critical Effects

Calcium hydroxide	1305-62-0	irritation
Crystalline Silica	14808-60-7	silicosis; lung function; lung fibrosis; cancer

OSHA - Final PELs - Time Weighted Averages (TWAs)

Calcium hydroxide	1305-62-0	15 Mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
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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.

Hand protection Protective gloves.

Eye protection Wear chemical goggles.

General Avoid contact with the skin and the eyes. Wear suitable protective equipment.

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.

9. PHYSICAL & CHEMICAL PROPERTIES

Form Solid.

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability Stable at normal conditions. No hazards to be especially mentioned.

Incompatibility Fluoride. 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.

Component analysis - LD50

NIOSH - Selected LD50s and LC50s

Calcium hydroxide	1305-62-0	Oral LD50 Rat: 7340 mg/kg; Oral LD50 Mouse: 7300 mg/kg
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Carcinogenicity Cancer hazard.

ACGIH - Threshold Limits Values - Carcinogens

Crystalline Silica	14808-60-7	A2 - Suspected Human Carcinogen
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NTP (National Toxicology Program) - Report on Carcinogens - Known Carcinogens

Crystalline Silica	14808-60-7	Known Carcinogen
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Chronic toxicity Prolonged or repeated exposure may cause lung injury.

12. ECOLOGICAL INFORMATION

Ecotoxicity This material is not expected to be harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal instructions 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. Dispose in accordance with all applicable regulations.

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

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

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

Calcium hydroxide	1305-62-0	215-137-3
Crystalline Silica	14808-60-7	238-878-4

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

Calcium hydroxide	1305-62-0	Present
Crystalline Silica	14808-60-7	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 - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

NFPA ratings

Health: 0
Flammability: 0
Instability: 0

International regulations

Canada - WHMIS - Ingredient Disclosure List

Calcium hydroxide	1305-62-0	1 % (English Item 302, French Item 991)
Crystalline Silica	14808-60-7	1 % (English Item 1406, French Item 1491)

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 hydroxide 1305-62-0 Present

Crystalline Silica 14808-60-7 Carcinogen; Extraordinarily hazardous

New Jersey - Right to Know Hazardous Substance List

Calcium hydroxide 1305-62-0 sn 0322

Crystalline Silica 14808-60-7 sn 1660

Pennsylvania - RTK (Right to Know) List

Calcium hydroxide 1305-62-0 Present

Crystalline Silica 14808-60-7 Present as well as its dust

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

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