



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Concrete Crack Repair (Part A – Hardener)
RED LION PART NUMBER: 74504 (Part A)
PRODUCT TYPE: Epoxy Putty
CHEMICAL FAMILY: N/A

DATE PREPARED: 3/1/00

CHROMATE INDUSTRIAL CORPORATION
 100 DaVinci Drive, Bohemia, NY 11716 • (888) 567-2206

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	OSHA PEL	ACGIH TLV	STEL	CAS #
Aliphatic Amines and Epoxy Modifiers	N/D	N/D	N/D	Mixture

* An asterisk (*) indicates the toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372.

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Inhalation, Ingestion, Skin, Eyes

EFFECTS OF OVEREXPOSURE:

INHALATION: Can aggravate chronic respiratory disease (bronchitis, emphysema).

INGESTION: Ingestion may cause gastrointestinal irritation or ulceration. Oral LD50 for rats is 620 mg/kg.

SKIN CONTACT: May cause severe pain and irritation to skin. Can aggravate skin disorders and allergies. A single prolonged exposure may be harmful. The LD50 for skin absorption in rabbits is 1000 mg/kg.

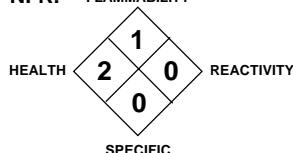
EYE CONTACT: May cause severe pain and irritation to eyes. Can result in adverse eye effects (conjunctivitis or corneal damage).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None

HAZARD RATINGS

NFR: FLAMMABILITY

HMIS:



2	HEALTH
1	FLAMMABILITY
0	REACTIVITY
B	PROTECTION

4. FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air and administer oxygen if breathing is difficult.

INGESTION: Call physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel.

SKIN CONTACT: Immediately flush skin with water for at least 15 minutes. Get medical attention for burns or if rash develops.

EYE CONTACT: Immediate and continuous irrigation with flowing water for at least 30 minutes. Call physician.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USE): 210°F (99°C) CC **FLAMMABLE LIMITS:** None **LEL:** N/D **UEL:** N/D

EXTINGUISHING MEDIA: CO₂, water spray, dry chemical, foam.

FIRE FIGHTING PROCEDURES: Toxic fumes (CO₂, CO and NO) will evolve when this material is involved in a fire. Self-contained breathing apparatus should be made available to fire fighters. Keep containers cool.

UNUSUAL AND EXPLOSION HAZARDS: None

6. ACCIDENTIAL RELEASE MEASURES

SPILLS OR LEAKS: Scoop up material and return to containers if not contaminated, otherwise soak up with absorbent.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS: Wear protective clothing including chemical gloves and splash goggles. Wash hands before eating, drinking, smoking or using toilet facilities. Use with adequate ventilation. Mixing part A and B may produce enough heat to cause burns. Warn and train workers concerning the hazards of working with crystalline silica. Avoid creation of respirable dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY: Respiratory protection is unnecessary provided there is adequate ventilation. Otherwise, use a cartridge mask, NIOSH approved for organic vapors is recommended. Avoid breathing vapors.

SKIN PROTECTION: Chemical resistant gloves.

EYE PROTECTION: Chemical goggles or safety glasses with side shields. Contact lenses should not be worn.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clothing with long sleeve shirts to cover skin.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Launder contaminated clothing before reuse.

EXPOSURE GUIDELINES: Use good general mechanical ventilation and exhaust. Avoid breathing vapors and dusts. Do not permit dust to accumulate.

ENGINEERING CONTROLS: No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: >380°F

VAPOR PRESSURE: N/A

VAPOR DENSITY (AIR = 1): N/A

SOLUBILITY IN WATER: N/A

APPEARANCE AND ODOR: Clear liquid, ammonia odor

SPECIFIC GRAVITY (H₂O = 1): N/A

MELTING POINT: N/A

pH: Does not apply

% VOLATILES: 0.00

FORM: Putty

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing materials

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Ammonia, hydrogen cyanide, NO, CO, CO₂. Oxygen starved conditions can produce nitriles, amides, carbamates, isocyanates, cyanogens, cyanic acid.

11. TOXICOLOGICAL INFORMATION

EYE: No data available. **SKIN:** No data available. **INGESTION:** No data available. **INHALATION:** No data available.

SUBCHRONIC: No data available.

CHRONIC CARCINOGENICITY:

CARCINOGENICITY: NTP: Not Listed **IARC MONOGRAPH:** Not Listed **OSHA REGULATED:** Not Regulated

TERATOLOGY: No data available.

REPRODUCTION: No data available.

MUTAGENICITY: No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available.

CHEMICAL FATE INFORMATION: No data available.

13. DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS: Not a RCRA Hazardous Waste Material

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations. Incineration is acceptable and the preferred method of disposal.

14. TRANSPORT INFORMATION

TRANSPORTATION REQUIREMENTS (49CFR172-101)

D.O.T. CLASSIFICATION: Not regulated

D.O.T. SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

EXPOSURE LIMITS: No data available.

16. OTHER INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this MSDS. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

N/D — NOT DETERMINED N/A — NOT APPLICABLE N/R — NOT REGULATED

Conforms to 29 CFR 1910.1200, OSHA

ANSI Z129.1 - 1988 American National Standard for Hazardous Industrial Chemicals



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Concrete Crack Repair (Part B – Base)
RED LION PART NUMBER: 74504 (Part B)
PRODUCT TYPE: Epoxy Putty
CHEMICAL FAMILY: N/A

DATE PREPARED: 3/1/00

CHROMATE INDUSTRIAL CORPORATION
100 DaVinci Drive, Bohemia, NY 11716 • (888) 567-2206

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	OSHA PEL	ACGIH TLV	STEL	CAS #
Resin based on Bisphenol A	N/D	N/D	N/D	25068-38-6
Diglycidyl Ether Polymer Pigments				

* An asterisk (*) indicates the toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372.

3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Inhalation, Ingestion, Skin, Eyes

EFFECTS OF OVEREXPOSURE:

INHALATION: Because of its low toxicity, it is unlikely to be an inhalation hazard.

INGESTION: The LD50 for rats is 11.4 g/kg (15.6 g/kg mice).

SKIN CONTACT: May cause irritation to skin and may aggravate allergies, eczema or other skin conditions. The LD50 for rabbits is >20 ml/kg.

EYE CONTACT: May cause irritation to eyes.

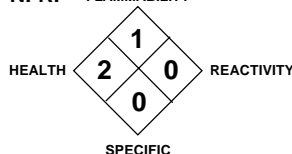
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None

HAZARD RATINGS

NFR: FLAMMABILITY

HMS:

2	HEALTH
1	FLAMMABILITY
0	REACTIVITY
B	PROTECTION



4. FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air and administer oxygen if breathing is difficult.

INGESTION: Call physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel.

SKIN CONTACT: Immediately flush skin with water for at least 15 minutes. Get medical attention for burns or if rash develops.

EYE CONTACT: Immediate and continuous irrigation with flowing water for at least 30 minutes. Call physician.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USE): 480°F (249°C) PMCC **FLAMMABLE LIMITS:** None **LEL:** N/D **UEL:** N/D

EXTINGUISHING MEDIA: CO₂, water spray, dry chemical, foam.

FIRE FIGHTING PROCEDURES: Toxic fumes (CO₂, CO and aldehydes) will evolve when this material is involved in a fire. Self-contained breathing apparatus should be made available to fire fighters. Keep containers cool.

UNUSUAL AND EXPLOSION HAZARDS: None

6. ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS: Scoop up material and return to containers if not contaminated, otherwise soak up with absorbent.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS: Wear protective clothing including chemical gloves and splash goggles. Wash hands before eating, drinking, smoking or using toilet facilities. Use with adequate ventilation. Mixing part A and B may produce enough heat to cause burns. Warn and train workers concerning the hazards of working with crystalline silica. Avoid creation of respirable dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY: Respiratory protection is unnecessary provided there is adequate ventilation. Otherwise, use a cartridge mask, NIOSH approved for organic vapors is recommended. Avoid breathing vapors.

SKIN PROTECTION: Chemical resistant gloves.

EYE PROTECTION: Chemical goggles or safety glasses with side shields. Contact lenses should not be worn.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clothing with long sleeve shirts to cover skin.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Launder contaminated clothing before reuse.

EXPOSURE GUIDELINES: Use good general mechanical ventilation and exhaust. Avoid breathing vapors and dusts. Do not permit dust to accumulate.

ENGINEERING CONTROLS: No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: >500°F (260°C)

VAPOR PRESSURE: N/A

VAPOR DENSITY (AIR = 1): N/A

SOLUBILITY IN WATER: N/A

APPEARANCE AND ODOR: Gray liquid, mild odor

SPECIFIC GRAVITY (H₂O = 1): N/A

MELTING POINT: N/A

pH: Does not apply

% VOLATILES: 0.00

FORM: Putty

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: High temperature, strong acids/bases

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CO, CO₂, aldehydes

11. TOXICOLOGICAL INFORMATION

EYE: No data available. **SKIN:** No data available. **INGESTION:** No data available. **INHALATION:** No data available.

SUBCHRONIC: No data available.

CHRONIC CARCINOGENICITY:

CARCINOGENICITY: NTP: Not Listed

IARC MONOGRAPH: Not Listed

OSHA REGULATED: Not Regulated

TERATOLOGY: No data available.

REPRODUCTION: No data available.

MUTAGENICITY: No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available.

CHEMICAL FATE INFORMATION: No data available.

13. DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS: Not a RCRA Hazardous Waste Material

WASTE DISPOSAL METHOD: Not a hazardous waste by RCRA criteria. Dispose of properly by federal, state and local regulations.

14. TRANSPORT INFORMATION

TRANSPORTATION REQUIREMENTS (49CFR172-101)

D.O.T. CLASSIFICATION: Not regulated

D.O.T. SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

EXPOSURE LIMITS: No data available.

16. OTHER INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this MSDS. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

N/D — NOT DETERMINED N/A — NOT APPLICABLE N/R — NOT REGULATED

Conforms to 29 CFR 1910.1200, OSHA

ANSI Z129.1 - 1988 American National Standard for Hazardous Industrial Chemicals



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Concrete Crack Repair (Part C – Quartz)
RED LION PART NUMBER: 74504 (Part C)
PRODUCT TYPE: Epoxy Putty
CHEMICAL FAMILY: N/A

DATE PREPARED: 3/1/00

CHROMATE INDUSTRIAL CORPORATION
 100 DaVinci Drive, Bohemia, NY 11716 • (888) 567-2206

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	OSHA PEL	ACGIH TLV	STEL	CAS #
Crystalline Quartz	N/D	N/D	N/D	14808-60-7
Crystalline Quartz (respirable)	10 mg/m ³	N/D	N/D	
	% SiO ₂ + 2			
Quartz (total dust)	30 mg/m ³	N/D	N/D	
	% SiO ₂ + 2			

ACGIH 8-hr. TWA: 50 micrograms respirable free Silica per cubic meter of air (50Ug/m³)
OSHA PEL 8-hr. TWA (respirable dust): 0.10 mg/m³ - See 29 CFR, Part 1910.1000 (Z-3 Table) for mineral dusts, Quartz (respirable) "specifically" Silica; Crystalline.

The percent of quartz in the formula is the amount determined from an airborne sample. Both concentration and percent quartz for the application of this limit are to be determined from actions passing a size-selector (10 microns or smaller).

* An asterisk (*) indicates the toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and 40 CFR 372.

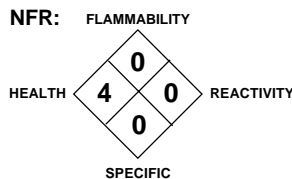
3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Inhalation
EFFECTS OF OVEREXPOSURE:

INHALATION: Symptoms are dyspnea - caused by many lung scars that develop from the silica dust - pain in chest, decrease vital capacity and cough. Chronic lung scarring leads to a progressive massive fibrosis that is often accompanied by increased susceptibility to the risk of impaired health due to a combination of smoking and silica dust exposure. Excessive inhalation of dust may result in respiratory disease, including silicosis, pneumoconiosis and pulmonary fibrosis. IARC has evaluated in Volume 42, Monographs on the Evaluation of the Carcinogenicity Risk of Chemicals to Humans, Silica and Some Silicates (1987), that there is "sufficient evidence for the carcinogenicity crystalline silica in experimental animals" and "limited evidence" with respect to humans.

INGESTION: None **SKIN CONTACT:** None **EYE CONTACT:** None
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None

HAZARD RATINGS



HMIS:

4	HEALTH
0	FLAMMABILITY
0	REACTIVITY
B	PROTECTION

4. FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air and administer oxygen if breathing is difficult.
INGESTION: Call physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel.
SKIN CONTACT: Immediately flush skin with water for at least 15 minutes. Get medical attention for burns or if rash develops.
EYE CONTACT: Immediate and continuous irrigation with flowing water for at least 30 minutes. Call physician.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD USE): None **FLAMMABLE LIMITS:** None **LEL:** N/D **UEL:** N/D
EXTINGUISHING MEDIA: Not available
FIRE FIGHTING PROCEDURES: None
UNUSUAL AND EXPLOSION HAZARDS: None

6. ACCIDENTAL RELEASE MEASURES

SPILLS OR LEAKS: If uncontaminated, collect spill using dustless method (water or vacuum). If contaminated, use appropriate method in consideration of contamination.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS: Wear protective clothing including chemical gloves and splash goggles. Wash hands before eating, drinking, smoking or using toilet facilities. Use with adequate ventilation. Mixing part A and B may produce enough heat to cause burns. Warn and train workers concerning the hazards of working with crystalline silica. Avoid creation of respirable dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

RESPIRATORY: Respiratory protection is unnecessary provided there is adequate ventilation. Otherwise, use a cartridge mask, NIOSH approved for organic vapors is recommended. Avoid breathing vapors.

SKIN PROTECTION: Chemical resistant gloves.

EYE PROTECTION: Chemical goggles or safety glasses with side shields. Contact lenses should not be worn.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clothing with long sleeve shirts to cover skin.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Launder contaminated clothing before reuse.

EXPOSURE GUIDELINES: Use good general mechanical ventilation and exhaust. Avoid breathing vapors and dusts. Do not permit dust to accumulate.

ENGINEERING CONTROLS: No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 4046°F (2230°C)

VAPOR PRESSURE: N/A

VAPOR DENSITY (AIR = 1): N/A

SOLUBILITY IN WATER: N/A

APPEARANCE AND ODOR: Tan/White powder, odorless

SPECIFIC GRAVITY (H₂O = 1): 2.65

MELTING POINT: N/A

pH: Does not apply

% VOLATILES: 0.00

FORM: Putty

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITY (MATERIALS TO AVOID): Hydrofluoric acid, alkalies manganese trioxide

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: None

11. TOXICOLOGICAL INFORMATION

EYE: No data available. **SKIN:** No data available. **INGESTION:** No data available. **INHALATION:** No data available.

SUBCHRONIC: No data available.

CHRONIC CARCINOGENICITY: Silica and some silicates (1987), that there is "sufficient evidence for the carcinogenicity crystalline silica in experimental animals" and "limited evidence" with respect to humans.

CARCINOGENICITY: NTP: Not Listed **IARC MONOGRAPH:** Not Listed **OSHA REGULATED:** Not Regulated

TERATOLOGY: No data available.

REPRODUCTION: No data available.

MUTAGENICITY: No data available.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data available.

CHEMICAL FATE INFORMATION: No data available.

13. DISPOSAL CONSIDERATIONS

RCRA HAZARD CLASS: Not a RCRA Hazardous Waste Material

WASTE DISPOSAL METHOD: If uncontaminated, dispose of as an inert, non-metallic mineral. If contaminated, use appropriate method in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

TRANSPORTATION REQUIREMENTS (49CFR172-101)

D.O.T. CLASSIFICATION: Not regulated

D.O.T. SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

EXPOSURE LIMITS: No data available.

16. OTHER INFORMATION

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