

Safety Data Sheet
CRACKBOND® LR-321 TXO

Created On: 03/03/2015
 Revision Date: 04/06/2016
 Version: 3.0

1. Product and Company Identification

Product Name: CRACKBOND LR-321 TXO (Part A)

Product Use: Concrete Repair

Company Identification:
 ADHESIVES TECHNOLOGY CORP.
 450 East Copans Road
 Pompano Beach, FL 33064
 Contact Phone: 1.800.892.1880
 (9:00a.m. – 5:00p.m. EST)

Emergency Phone:
 Chem-Tel:
 1.800.255.3924 (24hrs)

2. Hazards Identification (Part A)

GHS Classification

Health	Physical	Environmental
Skin Irritant Cat 2 Eye Irritant Cat 2B Skin Sensitizer Cat 1 Carcinogen Cat 2	Not Classified	Not Classified

GHS Label:

Warning:



Skin Sensitizer
 Eye Irritant
 Skin Irritant

Emergency Overview

May cause an allergic skin reaction
 Causes skin and eye irritation
 May cause cancer
 Wash skin thoroughly after handling
 Avoid breathing fume/gas/mist/vapors/spray
 Wear protective gloves/ protective clothing/ eye protection/ face protection
 Use outdoors or in a well-ventilated area

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, **this classification is not relevant.** (Note: sanding of this product will create a possible dust hazard).

3. Composition/ Information on Ingredients (Part A)

<u>CAS Number</u>	<u>Content %</u>	<u>Chemical Name</u>
25085-99-8	60 – 80	Diglycidyl Ether of Bisphenol A
68609-97-2	7 – 15	Glycidyl Ether
13463-67-7	0.1 - 1	Titanium Dioxide
Proprietary	15 - 30	Non – Hazardous Proprietary Ingredients

4. First Aid Measures (Part A)

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist.

Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part A)

Flash Point: N/D

Flammable Limits: N/D

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

6. Accidental Release Measures (Part A)

Personal Precautions:

Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

7. Handling and Storage (Part A)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling.

Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 °C and 35 °C (40°F and 95° F).

8. Exposure Control and Personal Protection (Part A)

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Personal Protective Equipment

Respiratory Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties (Part A)

Appearance:	White Paste
Evaporation Rate:	N/D
Odor:	N/D
Solubility in Water:	N/D
Specific Gravity(g/cc):	N/D
Vapor Density(air = 1):	Non-volatile
Vapor Pressure:	N/D
VOC Content:	See section 9 of part B for VOC content
pH:	N/D
Boiling Point:	N/D

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

10. Stability and Reactivity (Part A)

Stability:	Stable
Thermal Decomposition:	Can yield CO, CO ₂ and organic Nitrogen compounds.
Incompatibility:	Strong acids, peroxides, and other oxidizing agents
Conditions to avoid:	Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

11. Toxicological Information (Part A)

Acute Oral Toxicity:
Not Determined

Acute Dermal Toxicity:
Not Determined

Acute Inhalation Toxicity:
Not Determined

Skin Irritation:
Irritating to skin
The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation:
Irritating to eyes.
The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory Irritation:
Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization:
May cause allergic skin reaction and irritation to the respiratory system.
The product has not been tested. The statement has been derived from the properties of the individual components.

STOT – single exposure
Not Determined

STOT – Repeated Exposure
Not Determined

Carcinogenicity Classification:
Titanium Dioxide:
IARC Group 2B: Possibly carcinogenic to humans.

Safety Data Sheet
CRACKBOND® LR-321 TXO

Created On: 03/03/2015
 Revision Date: 04/06/2016
 Version: 3.0

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

12. Ecological Information (Part A)

Fish:

Bisphenol A:
 Fathead minnow/LC50 (96hrs): >3.1mg/l

Aquatic Invertebrates:

Bisphenol A:
 Water Flea Daphnis/EC 50 (48hrs): > 1.4mg/l

Algae:

No Data Available

Microorganisms:

Bisphenol A:
 Bacteria, (Growth inhibition)/IC50 (18hrs): > 42.6mg/l

Mobility:

Considering the use of the substance, it is unlikely that significant environmental exposure in the air or water will arise.

13. Disposal Considerations (Part A)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

14. Transportation Information (Part A)

This product is not regulated as a hazardous material for transportation.

15. Regulatory Information (Part A)

HMIS Rating	
Health	2
Flammability	1
Physical Hazard	0
PPE	B



Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme



Safety Data Sheet
CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

Federal Regulations

CERCLA RQ

SARA Title 311/312 Not Determined

CA Prop 65 This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

TSCA Listed or Exempt

State Regulations:

State RTK
NJ, MA, PA

CAS#
25085-99-8
13463-67-7

Chemical Name
Diglycidyl Ether of Bisphenol A
Titanium Dioxide

16. Other Information (Part A)

Hazard Communication: This SDS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, Adhesives Technology Corp. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.

Safety Data Sheet
CRACKBOND® LR-321 TXO

Created On: 03/03/2015
 Revision Date: 04/06/2016
 Version: 3.0

1. Product and Company Identification

Product Name: CRACKBOND LR-321 TXO (Part B)

Product Use: Concrete Repair

Company Identification:
 ADHESIVES TECHNOLOGY CORP.
 450 East Copans Road
 Pompano Beach, FL 33064
 Contact Phone: 1.800.892.1880
 (9:00a.m. – 5:00p.m. EST)

Emergency Phone:
 Chem-Tel:
 1.800.255.3924 (24hrs)

2. Hazards Identification (Part B)

GHS Classification

Health	Physical	Environmental
Skin Corrosion Cat 1 Serious Eye Damage Cat 1 Reproductive Toxicity Cat 2	Not Classified	Not Classified

GHS Label:

Danger:



Corrosive to skin
 Serious eye damage



Reproductive Toxicity

Emergency Overview

Causes skin burns
 Causes severe eye damage
 Suspected of damaging fertility
 Wash skin thoroughly after handling
 Avoid breathing fume/gas/mist/vapors/spray
 Wear protective gloves/ protective clothing/ eye protection/ face protection
 Use outdoors or in a well-ventilated area
 Avoid contact during pregnancy/while nursing

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

3. Composition/ Information on Ingredients (Part B)

CAS Number

Content%

Chemical Name

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

68953-36-6	40 - 60	Polyamido Amine
140-31-8	20 - 40	N- Aminoethylpiperazine
112-24-3	1 - 5	Triethylenetetramine
84852-15-3	15 - 30	Nonyl Phenol
90-72-2	1 - 5	Tris-2,4,6(dimethylaminomethyl)phenol

4. First Aid Measures (Part B)

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist.

Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part B)

Flash Point: N/D

Flammable Limits: N/D

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

6. Accidental Release Measures (Part B)

Personal Precautions:

Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

7. Handling and Storage (Part B)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling.

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 °C and 35 °C (40°F and 95° F).

8. Exposure Control and Personal Protection (Part B)

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Personal Protective Equipment

Respiratory Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties (Part B)

Appearance:	Black Paste
Evaporation Rate:	N/D
Odor:	Slight Odor
Solubility in Water:	N/D
Specific Gravity(g/cc):	N/D
Vapor Density(air = 1):	Non-Volatile
Vapor Pressure:	N/D
VOC Content:	1 g/L (tested per EPA CFR 40, Part 63, Subpart PPPP, Appendix A) 17 g/L (calculated per SCAQMD rule 443.1)
pH:	N/D
Boiling Point:	N/D

10. Stability and Reactivity (Part B)

Stability:	Stable
Thermal Decomposition:	Can yield CO, CO ₂ and organic Nitrogen compounds.
Incompatibility:	Strong acids, peroxides, and other oxidizing agents
Conditions to avoid:	Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

Safety Data Sheet CRACKBOND® LR-321 TXO

Created On: 03/03/2015
Revision Date: 04/06/2016
Version: 3.0

11. Toxicological Information (Part B)

Acute Oral Toxicity:
Not Determined

Acute Dermal Toxicity:
Not Determined

Acute Inhalation Toxicity:
Not Determined

Skin Irritation:
Corrosive to skin
The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation:
Severe damage to eyes.
The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory Irritation:
Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization:
May cause allergic skin reaction and irritation to the respiratory system.
The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity Classification:
No known carcinogens

12. Ecological Information (Part B)

At the present state of knowledge, no negative ecological effects are expected. Past experiences have shown this material to have no harmful effect on the environment.

13. Disposal Considerations (Part B)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

14. Transportation Information (Part B)

DOT (US)

CARTRIDGE: Limited Quantity, LTD QTY

***BULK:** AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

*Bulk packaging in quantities of 1.3 gallons (net) or less are packaged in accordance with the limited quantity exception.

Safety Data Sheet
CRACKBOND® LR-321 TXO

Created On: 03/03/2015
 Revision Date: 04/06/2016
 Version: 3.0

IATA/ICAO

CARTRIDGE/BULK: AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

IMDG

CARTRIDGE/BULK: AMINES, LIQUID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 2735, PG III

15. Regulatory Information (Part B)

HMIS Rating	
Health	*3
Flammability	1
Physical Hazard	0
PPE	B

NFPA Rating



Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

SARA Title 311/312

Chronic Health Hazard

CA Prop 65

Not Regulated

TSCA

Listed

State Regulations:

State RTK
 NJ, MA, PA

CAS#
 140-31-8
 84852-15-3

Chemical Name
 n-aminoethylpiperazine
 nonylphenol

16. Other Information

Hazard Communication: This SDS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, Adhesives Technology Corp. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.