

## MATERIAL SAFETY DATA SHEET

<b>Section 1 – Product and Company Identification</b>						
Company Identification ADHESIVES TECHNOLOGY CORP. 450 East Copans Road Pompano Beach, FL 33064			Emergency Phone (800) 255-3924 (24 hours) CHEM-TEL Contact Phone (800) 892-1880 (9:00 a.m. – 5:00 p.m. EST)			
Effective Date: 03/13/09		Print Date: 03/13/09		MSDS #: LR321		
Product Name: Crackbond LR-321			Prepared By: Richard Boland (x107)			
<b>Section 2 – Composition/Information on Ingredients</b>						
<b>Part A: Hazardous Component</b>		CAS #	% By Weight	PEL	TLV	STEL
Diglycidyl Ether of Bisphenol A		25085-99-8	> 50%	NE	NE	NE
Alkyl Glycidyl Ether		68609-97-2	< 50%	NE	NE	NE
<b>Part B: Hazardous Component</b>			% By Weight	PEL	TLV	STEL
n-aminoethylpiperazine		140-31-8	> 10%	NE	NE	NE
Triethylenetetramine		112-24-3	< 10%	NE	NE	NE
Cycloaliphatic Amine		Proprietary	< 10%	NE	NE	NE
Nonyl phenol-		84852-15-3	< 35%	NE	NE	NE
Polyamido Amine		68605-86-7	> 35%	NE	NE	NE
<b>Section 3 – Hazards Identification</b>						
<b>Known Hazards:</b> Part A: Skin and eye irritation. Sensitizer; Part B: Corrosive						
<b>Signs and Symptoms of Exposure:</b> Part A: Eyes: Irritation. Corneal injury is not expected. Skin: Irritation. Can cause allergic skin reactions in susceptible individuals, e.g. itching, redness, swelling, etc. Inhalation: No ill effects expected. Heated vapors can cause irritation. Part B: Eyes: Irritation. Possible eye burns. Skin: Can cause irritation and skin burns. Inhalation: No ill effects expected. Heated vapors can cause irritation.						
<b>Medical Conditions Aggravated by Exposure:</b> Skin, eye, and respiratory conditions						
<b>Routes of Exposure:</b> Dermal. Inhalation.						
<b>Carcinogenicity:</b> This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.						
<b>Section 4 – First Aid Measures</b>						
<b>Inhalation:</b> Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.						
<b>Eyes:</b> Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist.						
<b>Skin:</b> Wash with mild soap and water. Launder contaminated clothing before reuse.						
<b>Ingestion:</b> If conscious, give plenty of water; do not induce vomiting unless directed to by a physician. Call a physician.						
<b>Other:</b> 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.						
<b>Section 5 – Fire Fighting Measures</b>						
<b>Flash Point:</b> > 200° F			<b>Flammable Limits:</b> N/A			
<b>Extinguisher Media:</b> Carbon Dioxide, Dry Chemical, Water Spray, Foam						
<b>Special Fire Fighting Procedures:</b> Use a self-contained breathing apparatus when fighting fires involving chemicals.						
<b>Unusual fire and Explosion Hazards:</b> None known. Thermal decomposition products can be formed.						
<b>Section 6 – Accidental Release Measures</b>						
Avoid all personal contact, scoop up with spade and place in disposable metal container. Flush contaminated areas.						
<b>Section 7 – Handling and Storage</b>						
Avoid contact with eyes, skin and clothing. Avoid prolonged inhalation of vapors. Use with adequate ventilation. Wash thoroughly after handling. Store in a cool dry place out of direct rays of the sun. Keep from freezing. Recommended storage temperature range in between 40° and 95° F.						
<b>Section 8 – Exposure Control/Personal Protection</b>						

<b>Respiratory Protection:</b> None normally required. Use a NIOSH –approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.					
<b>Ventilation:</b> General (natural or mechanical induced fresh air movements)					
<b>Eye Protection:</b> Wear splash proof chemical goggles					
<b>Protective Gloves:</b> Cloth or impermeable (neoprene or rubber) gloves					
<b>Other Protective Clothing or Equipment:</b> Wear appropriate apparel to prevent skin contact					
<b>Section 9 – Physical and Chemical Properties</b>					
<b>Appearance:</b> Part A: Clear Liquid; Part B: Amber Liquid			<b>Specific Gravity:</b> Part A: 1.13; Part B: 0.96		
<b>Odor:</b> Part A: Slight Odor; Part B: Slight Amine Odor			<b>pH:</b> N/D		
<b>Boiling Point:</b> N/A			<b>Vapor Density:</b> N/A		
<b>Vapor Pressure:</b> N/A			<b>VOC Content:</b> N/A		
<b>Solubility in Water:</b> Insoluble			<b>Evaporation Rate:</b> N/A		
<b>Section 10 – Stability and Reactivity</b>					
<b>Hazardous Polymerization:</b> Will not occur			<b>Stability:</b> Stable		
<b>Incompatibility:</b> Strong acids, peroxides, and other oxidizing agents					
<b>Hazardous Decomposition Products:</b> Thermal decomposition can yield CO, CO <sub>2</sub> and organic Nitrogen compounds.					
<b>Conditions to Avoid:</b> Exposure to excessive heat and storage above 95° F will shorten shelf life					
<b>Section 11 – Toxicological Information</b>					
For detailed toxicological information on the components of this material, contact the address listed in Section 1 of this MSDS.					
<b>Section 12 – Disposal Considerations</b>					
If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.					
<b>Section 13 – Transport Information</b>					
<b>DOT Shipping Information:</b> CARTRIDGE - Consumer commodity, ORM-D BULK: Corrosive Liquids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1760, PG III.					
<b>ICAO Shipping name:</b> CARTRIDGE: Corrosive Liquids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1760, PG III, Ltd Qty. BULK: Corrosive Liquids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1760, PG III.					
<b>IATA Shipping name:</b> CARTRIDGE & BULK: Corrosive Liquids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1760, PG III.					
<b>Section 14 – Regulatory Information</b>					
<b>Hazard Communication:</b> This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard.					
<b>EPA Waste Code(s):</b> Not regulated by EPA as a hazardous waste					
<b>SARA Title III, Section 313:</b> This product contains no chemicals which are subject to reporting under Section 313 of SARA Title III					
<b>HMIS Rating</b>	<b>Part A</b>	<b>Part B</b>	<b>NFPA Hazard Rating</b>	<b>Part A</b>	<b>Part B</b>
<b>Health</b>	1	2	<b>Health</b>	1	2
<b>Flammability</b>	1	1	<b>Flammability</b>	1	1
<b>Reactivity</b>	0	0	<b>Reactivity</b>	0	0
<b>PPE</b>	B	B			
<b>TSCA Inventory Status:</b> Chemical components listed on TSCA inventory					
<b>Abbreviations:</b> PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. C = Ceiling. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable. ppm = parts per million					
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.					