MATERIAL SAFETY DATA SHEET

Section 1 – Product and Company Identification

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: 10-6-2011	Print Date: 10-6-2011	MSDS #: MB1450

Product Name: Miraclebond 1450	**Prepared By:** Richard Boland (x107)

Section 2 – Composition/Information on Ingredients

Part A: Hazardous Component	CAS #	% By Weight	PEL	TLV	STEL
Diglycidyl Ether of Bisphenol A	25085-99-8	> 50%	NE	NE	NE
Hydrous magnesium silicate	14807-96-6	< 15%	20 mppcf	2 mg/m3	NE
Titanium Dioxide	13463-67-7	< 5%	NE	5 mg/m^3	NE
Non-Hazardous Proprietary Ingredients	-	< 30%	NE	NE	NE
Part B: Hazardous Component	CAS #	% By Weight	PEL	TLV	STEL
n-aminoethylpiperazine	140-31-8	< 10%	NE	NE	NE
Nonyl phenol-	84852-15-3	< 10%	NE	NE	NE
Modified Poly amido amine	Trade secret	< 25%	NE	NE	NE
Triethylenetetramine	112-24-3	< 10%	NE	NE	NE
Hydrous magnesium silicate	14807-96-6	< 25%	20 mppcf	2 mg/m3	NE
Non-Hazardous Proprietary Ingredients	-	> 20%	NE	NE	NE

Section 3 – Hazards Identification

Known Hazards: Part A: Skin and eye irritation. Sensitizer; **Part B:** Corrosive

Signs and Symptoms of Exposure: 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.

Medical Conditions Aggravated by Exposure: Skin, eye, and respiratory conditions

Routes of Exposure: Dermal. Inhalation.

Carcinogenicity: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

Section 4 – First Aid Measures

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: Wash with mild soap and water. Launder contaminated clothing before reuse.

Ingestion: If conscious, give plenty of water; do not induce vomiting unless directed to by physician. Call a physician.

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.

Section 5 – Fire Fighting Measures

Flash Point: Part A: > 300º F. **Part B:** > 200º F	**Flammable Limits:** N/A

Extinguisher Media: Carbon Dioxide, Dry Chemical, Water Spray, Foam

Special Fire Fighting Procedures: Use a self-contained breathing apparatus when fighting fires involving chemicals.

Unusual fire and Explosion Hazards: None known. Thermal decomposition products can be formed.

Section 6 – Accidental Release Measures

Avoid all personal contact, scoop up with spade and place in disposable metal container. Flush contaminated areas.

Section 7 – Handling and Storage

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 40º and 95º F.

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Section 8 – Exposure Control/Personal Protection

Respiratory Protection: None normally required. Use a NIOSH –approved organic vapor chemical cartridge Respirator when air movement is inadequate to control vapor build-up.

Ventilation: General (natural or mechanical induced fresh air movements)

Eye Protection: Wear splash proof chemical goggles

Protective Gloves: Cloth or impermeable (neoprene or rubber) gloves

Other Protective Clothing or Equipment: Wear appropriate apparel to prevent skin contact

Section 9 – Physical and Chemical Properties

Appearance: Part A: White Paste; **Part B:** Black Paste		**Specific Gravity (g/cc): Part A:** 1.35; **Part B:** 1.24	
Odor: Part A: Slight Odor; **Part B:** Slight Amine Odor		**pH:** N/D	**Boiling Point:** N/A
Vapor Density: Non-volatile	**Vapor Pressure:** N/A	**VOC Content:** 0 g/l (when mixed)	
Solubility in Water: Insoluble		**Evaporation Rate:** Non-volatile	

Section 10 – Stability and Reactivity

Hazardous Polymerization: Will not occur	**Stability:** Stable

Incompatibility: Strong acids, peroxides, and other oxidizing agents

Hazardous Decomposition Products: Thermal decomposition can yield CO, CO_2 and organic Nitrogen compounds.

Conditions to Avoid: Exposure to excessive heat and storage above 95º F will shorten shelf life

Section 11 – Toxicological Information

For detailed toxicological information on the components of this material, contact the address listed in Section 1.

Section 12 – Disposal Considerations

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

Section 13 – Transport Information

DOT Shipping Information:
CARTRIDGE - Consumer commodity, ORM-D
BULK – Corrosive Solids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1759, PG III

IATA/ICAO Shipping name:
CARTRIDGE: Corrosive Solids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1759, PG III, Ltd Qty
BULK: Corrosive Solids, NOS (aminoethylpiperazine, nonylphenol), Class 8, UN 1759, PG III

Section 14 – Regulatory Information

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

EPA Waste Code(s): Not regulated by EPA as a hazardous waste

SARA Title III, Section 313: This product contains no chemicals which are subject to reporting under Section 313 of SARA Title III

HMIS Rating	Part A	Part B	NFPA Hazard Rating	Part A	Part B
Health	2	2	**Health**	1	2
Flammability	1	1	**Flammability**	1	1
Reactivity	0	0	**Reactivity**	0	0
PPE	B	B			

TSCA Inventory Status: Chemical components listed on TSCA inventory
CEPA (DSL): Canada Inventory: All components are listed or exempted

Abbreviations: PEL = OSHA Permissible Exposure Limit; **TLV** = ACGIH Threshold Limit Value; **C** = Ceiling; **STEL** = Short Term Exposure Limit; **NE** = None Established; **NA** = Not Applicable. **ND** = Not Determined; **ppm** = parts per million

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