



GARLAND MATERIAL SAFETY DATA SHEET

MSDS Status: Current
Product Name: FILL-LOC CRACK REPAIR
Product Code: 1802-A
MSDS No.:

Product Status: Active
Revision Date: 08/31/2007
Supersedes Date: 06/07/2001

SECTION I - CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Chemical Name: MIXTURE
CAS No.: NOT APPLICABLE
Product Description: TWO COMPONENT 100% SOLIDS EPOXY CRACK FILLER
Hazard Classification: HEALTH - 2* FLAMMABILITY - 1 REACTIVITY - 0
Manufacturer/Supplier: GARLAND CANADA
1296 Martin Grove Rd.
Toronto, Ontario M9W 4X3
PH: (416) 747-7995 FAX: (416) 747-1908
Internet Address: <http://www.garlandind.com>

24 HR EMERGENCY ASSISTANCE: 1-800-762-8225

SECTION II - HAZARDOUS INGREDIENTS/COMPOSITION

	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE MM Hg @ TEMP	WEIGHT PERCENT
		OSHA PEL	ACGIH TLVR	OSHA STEL		
REACTION PRODUCTS OF EPICHLOROHYDRIN - BISPHEENOL A	25068-38-6	NONE	NONE	NONE	1.0 356 ^o F	
MODIFIED DIGLYCIDYL ETHER OF BISPHEENOL A	25068-38-6	NONE	NONE	NONE	1.0 356 ^o F	
ALKYL GLYCIDAL ETHER	68609-97-2	NONE	NONE	NONE	N/A	
FUMED SILICA	112945525	NONE	80mg/m3	NONE	N/A	
FORMALDAHYDE POLYMER WITH TOLUENE	25155-81-1	NONE	NONE	NONE	N/A	
*TOLUENE	108-88-3	100ppm	100ppm	NONE	1.0 -26 ^o F	<.5%
PIGMENT - **	NONE	10mg/m3	10mg/m3	5mg/m3	N/A	
FILLER - **		NONE	NONE	NONE	N/A	
FILLER - **		20mg/m3	20mg/m3	20mg/m3	N/A	
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	1.0 136 ^o F	

*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

** the chemical identity is trade secret

N/A = Not Applicable

SECTION III - HAZARDS IDENTIFICATION

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: NO GUIDE CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO NOSE, THROAT OR MUCOUS MEMBRANES.

SKIN CONTACT AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: SKIN: MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE. EYES: MAY CAUSE IRRITATION BUT NO CORNEAL INJURY IS LIKELY.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: NOT LIKELY TO BE ABSORBED IN TOXIC AMOUNTS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: THIS MATERIAL HAS A PROBABLE LOW ACUTE ORAL TOXICITY.

HEALTH HAZARDS (ACUTE AND CHRONIC): EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. EYES: INJURY IS UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO
NO CONSTITUENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.

SECTION IV - FIRST AID PROCEDURES

INHALATION OVEREXPOSURE: REMOVE TO FRESH AIR AREA AND ADMINISTER OXYGEN IS NECESSARY.

EYE CONTACT: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

SKIN CONTACT: SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION: LOW TOXICITY, INDUCE VOMITING ONLY IF LARGE AMOUNTS OF MATERIAL ARE INGESTED, OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE IMMEDIATELY CONSULT A PHYSICIAN.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 200+°F METHOD USED: SETA FLASH
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO₂, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES: DO NOT ENTER CONFINED FIRE AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NO UNUSUAL FIRE HAZARDS KNOWN.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: WEAR APPROPRIATE RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION VII - SAFE HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE IN A COOL PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS'S OF ALL COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS.

OTHER PRECAUTIONS: AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED

FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CANNOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION: USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER-EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. GENERAL EXHAUST IS USUALLY SUFFICIENT IN LIEU OF NIOSH RESPIRATOR.

VENTILATION: GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS.

PROTECTIVE GLOVES: IMPERVIOUS GLOVES, NEOPRENE OR RUBBER.

EYE PROTECTION: SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT: WEAR BODY COVERING CLOTHING AND OTHER COVERING AS NECESSARY, SUCH AS AN APRON AND APPROPRIATE FOOTWEAR AND AVOID CONTACT WITH THE MATERIAL.

WORK/HYGIENIC PRACTICES: OBSERVE GENERAL GOOD HYGIENIC PRACTICES.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 200°F - 401°F

SPECIFIC GRAVITY (H₂O=1): 1.4

VAPOR DENSITY: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: VISCOSITY PASTE - NEGLIGIBLE ODOR

SECTION X - STABILITY AND REACTIVITY DATA

STABILITY: STABLE.

CONDITIONS TO AVOID: AVOID EXCESSIVE HEAT OR OPEN FLAMES.

INCOMPATIBILITY (MATERIALS TO AVOID): CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.

HAZARDOUS DECOMPOSITION PRODUCTS: CO₂, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION XI - TOXICOLOGICAL INFORMATION

No information available.

SECTION XII - ECOLOGICAL INFORMATION

No data available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose of according to applicable Federal, State, County, and Local requirements.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	DOT-U.S./MOT-CANADA NON REGULATED MATERIAL (PAINT AND RELATED MATERIAL)
HAZARD CLASS:	NOT APPLICABLE
IDENTIFICATION NO:	NOT APPLICABLE
PACKAGING GROUP:	NOT APPLICABLE

SECTION XV - REGULATORY INFORMATION

WHMIS: This material contains the following ingredient(s) at, or above the minimum concentration specified on the WHMIS Ingredient Disclosure List under the Hazardous Products Act of Canada:

BENZYL ALCOHOL CAS No. 100-51-6
TOLUENE CAS No. 108-88-3

SARA 313: This product contains the following material(s) subject to the reporting requirements under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

TOLUENE CAS No. 108-88-3

CA Prop 65: This product contains the following chemical(s) known to the State of California to cause cancer or reproductive toxicity:

TOLUENE CAS No. 108-88-3, <0.5%

VOC STATUS: NOT AVAILABLE FOR INDIVIDUAL COMPONENTS

SECTION XVI - ADDITIONAL INFORMATION

No changes

Disclaimer

The information contained in this Material Safety Data Sheet has been prepared in accordance with the OSHA Hazard communication Standard CFR 1910.1200. This information relates specifically to the product designated and may not be valid for the product when used in combination with any other materials or products or in a particular process. The information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness, whether originating within the company or not. The user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with applicable federal, state or local hazard communications requirements. We do not accept responsibility for any loss or damage which may occur from the use of this information.

Prepared By: John Wenneman
Modified By:

Date: 06/07/2001

End of MSDS Document



GARLAND MATERIAL SAFETY DATA SHEET

MSDS Status: Current
Product Name: FILL-LOC CRACK REPAIR
Product Code: 1802-B
MSDS No.:

Product Status: Active
Revision Date: 08/31/2005
Supersedes Date: 06/07/2001

SECTION I - CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Chemical Name: MIXTURE
CAS No.: NOT APPLICABLE
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Hazard Classification: HEALTH - 2* FLAMMABILITY - 1 REACTIVITY - 0
Manufacturer/Supplier: GARLAND CANADA
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PH: (416) 747-7995 FAX: (416) 747-1980
Internet Address: <http://www.garlandind.com>

24 HR EMERGENCY ASSISTANCE: 1-800-762-8225

SECTION II - HAZARDOUS INGREDIENTS/COMPOSITION

	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE MM Hg @ TEMP	WEIGHT PERCENT
		OSHA PEL	ACGIH TLVR	OSHA STEL		
TRIETHYLENE TETRAMINE DIMER/TOFA, REACTION PRODUCTS WITH TETA	112-24-3	NONE	NONE	NONE	N/A	
NONYL PHENOL	68082-29-1	NONE	NONE	NONE	N/A	
N-AMINOETHYLPIPERAZINE	25154-52-2	NONE	NONE	NONE	N/A	
FORMALDAHYDE POLYMER WITH TOLUENE	140-31-8	NONE	NONE	NONE	N/A	
*TOLUENE	25155-81-1	NONE	NONE	NONE	N/A	
BENZYL ALCOHOL	108-88-3	100ppm	100ppm	NONE °F	1.0	-26
*XYLENE	100-51-6	100ppm	100ppm	150ppm °F	5.11	68
FUMED SILICA PIGMENT - **	1330-20-7	NONE	80mg/m3	NONE	N/A	
FILLER - **	112945525	3.5ppm	3.4ppm	NONE	N/A	
FILLER - **		NONE	NONE	NONE	N/A	
FILLER - **		20mg/m3	20 mg/m3	20mg/m3	N/A	

*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

** the chemical identity is a trade secret

XYLENE ACGIH STEL 150ppm

N/A = Not Applicable

SECTION III - HAZARDS IDENTIFICATION

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA AND DIZZINESS.

SKIN CONTACT AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: WILL CAUSE BURNS TO THE SKIN AND EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: NONE KNOWN.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: LIQUID CAN CAUSE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

HEALTH HAZARDS (ACUTE AND CHRONIC): PROLONGED OR REPEATED EXPOSURE OF THIS PRODUCT MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO
NO CONSTITUENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

SECTION IV - FIRST AID PROCEDURES

INHALATION OVEREXPOSURE: REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IS NECESSARY.

EYE CONTACT: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS. GET IMMEDIATE MEDICAL ASSISTANCE.

SKIN CONTACT: FLUSH SKIN WITH WATER FOR AT LEAST 15 AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

INGESTION: DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 200+⁰F METHOD USED: SETA FLASH
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO₂, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES: TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTERS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK, TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

SECTION VII - SAFE HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

OTHER PRECAUTIONS: MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS,

THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION VIII - EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION: NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS.

VENTILATION: AVOID BREATHING VAPORS. VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.

PROTECTIVE GLOVES: IMPERVIOUS GLOVES, NEOPRENE OR RUBBER.

EYE PROTECTION: SPLASH PROOF GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE EQUIPMENT: CLEAN BODY COVERING CLOTHING AS WELL AS APRON FOOTWEAR OR OTHER EQUIPMENT SHOULD BE USED AS DEEMED NECESSARY TO AVOID CONTACT WITH THE MATERIAL.

WORK/HYGIENIC PRACTICES: OBSERVE GENERAL GOOD HYGIENIC PRACTICES.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 279°F - 560°F

SPECIFIC GRAVITY (H₂O=1): 1.3

VAPOR DENSITY: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: VISCOUS PASTE WITH AMINE ODOR

SECTION X - STABILITY AND REACTIVITY DATA

STABILITY: STABLE.

CONDITIONS TO AVOID: AVOID CONTACT WITH OPEN FLAMES AND ALL SOURCES OF IGNITION AND SPARKS.

INCOMPATIBILITY (MATERIALS TO AVOID): AVOID CONTACT WITH STRONG OXIDIZING AGENTS, MINERAL ACIDS AND EPOXY RESINS IN UNCONTROLLED AMOUNTS.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂, NOX

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION XI - TOXICOLOGICAL INFORMATION

No information available.

SECTION XII - ECOLOGICAL INFORMATION

No data available.

SECTION XIII - DISPOSAL CONSIDERATIONS

Dispose of according to applicable Federal, State, County, and Local requirements.

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:	DOT-U.S./MOT-CANADA CORROSIVE LIQUID N.O.S. (CONTAINS N-AMINOETHYLPIPERAZINE)
HAZARD CLASS:	8
IDENTIFICATION NO:	UN1760
PACKAGING GROUP:	III

SECTION XV - REGULATORY INFORMATION

WHMIS: This material contains the following ingredient(s) at, or above the minimum concentration specified on the WHMIS Ingredient Disclosure List under the Hazardous Products Act of Canada:

BENZYL ALCOHOL	CAS NO.	100-51-6
TRIETHYLENE TETRAMINE	CAS No.	68082-29-1
NONYL PHENOL	CAS No.	25154-52-3
TOLUENE	CAS No.	108-88-3

SARA 313: This product contains the following material(s) subject to the reporting requirements under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

TOLUENE	CAS No.	108-88-3
XYLENE	CAS No.	1330-20-7

CA Prop 65: This product contains the following chemical(s) known to the State of California to cause cancer or reproductive toxicity:

TOLUENE	CAS No.	108-88-3, <0.5%
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VOC STATUS: NOT AVAILABLE FOR INDIVIDUAL COMPONENTS

SECTION XVI - ADDITIONAL INFORMATION

No changes

Disclaimer

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Prepared By: John Wenneman
Modified By:

Date: 06/07/2001

End of MSDS Document