MSDS Name	**DEVCON® Fasmetal 10 HVAC Repair (Special F)**
Manufacturer Name	ITW Polymers Adhesives, North America
Stock No.:	19770
Kit MSDS Revision Date	12/30/2012

Components	
	FASMETAL 10 HVAC REPAIR RESIN
	FASMETAL 10 HVAC REPAIR HARDENER
ITW Polymers Adhesives, North America Product Code : 19770	

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**FASMETAL 10 HVAC REPAIR HARDENER**
Manufacturer Name:	ITW Polymers Adhesives, North America
Address:	30 Endicott Street Danvers, MA 01923
General Phone Number:	(978) 777-1100
Emergency Phone Number:	(800) 424-9300
CHEMTREC:	For emergencies in the US, call CHEMTREC: 800-424-9300

HMIS

Health Hazard	3*
Fire Hazard	1
Reactivity	1
Personal Protection	x

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Barium sulfate	7727-43-7	30 - 60 by weight
Polyamide of tall-oil fatty acid dimers and tetraethylenepentamine	68953-36-6	5 - 10 by weight
2,4,6-Tris (Dimethylaminomethyl)phenol	90-72-2	1 - 5 by weight
Dimer/TOFA, reaction products with TETA	68082-29-1	10 - 30 by weight
Inert material	N/A	1 - 5 by weight
Non-hazardous ingredients.	N/A	1 - 5 by weight

Fillers	N/A	1 - 5 by weight
Triethylenetetramine	112-24-3	1 - 5 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	WARNING! Harmful. Potential Sensitizer. Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Can cause severe eye irritation and burns. Eye contact may cause permanent damage or blindness.
Skin:	Causes severe skin irritation. May cause permanent skin damage. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Vapor or mist may cause severe respiratory system irritation. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure may cause eye watering or discomfort, redness and swelling.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	>200°F (93.3°C)
Flash Point Method:	Tag Closed Cup (TCC)
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.
Unsuitable Media:	Water or foam may cause frothing.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Do not store in reactive metal containers. Keep away from acids, oxidizers.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.
Hygiene Practices:	Wash thoroughly after handling.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

Barium sulfate :

Guideline ACGIH:	10 mg/m3 TLV-TWA: 10 mg/m3
Guideline OSHA:	5 mg/m3 PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)
Notes :	Only established PEL and TLV values for the ingredients are listed.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Paste..
Color:	White.
Odor:	mild ammonia like.
Boiling Point:	>450°F (232.2°C)
Melting Point:	Not determined.
Specific Gravity:	1.73
Solubility:	30-60%
Vapor Density:	>1 (air = 1)
Vapor Pressure:	<0.01 mmHg @68°F
Percent Volatile:	0
Evaporation Rate:	<<1 (butyl acetate = 1)
pH:	10-11 @ 5 Percent Solution
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	>200°F (93.3°C)
Flash Point Method:	Tag Closed Cup (TCC)
Auto Ignition Temperature:	Not determined.
VOC Content:	0 g/L
Percent Solids by Weight	100

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.
Incompatible Materials:	Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc). Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites. Peroxides. Materials reactive with hydroxyl compounds.

SECTION 11 : TOXICOLOGICAL INFORMATION

Barium sulfate :

RTECS Number: CR0600000

2,4,6-Tris (Dimethylaminomethyl)phenol :

RTECS Number: SN3500000

Eye: Eye - Rabbit Standard Draize test.: 50 ug/24H [severe]

Skin: Administration onto the skin - Rat : 1280 mg/kg [Details of toxic effects not reported other than lethal dose value]
Administration onto the skin - Rabbit : 2 mg/24H
Administration onto the skin - Rabbit : 500 uL/24H
Administration onto the skin - Rat : 0.025 mL
Administration onto the skin - Rat : 0.25 mL

Ingestion: Oral - Rat LD50 : 1200 mg/kg [Peripheral Nerve and Sensation - Flaccid paralysis without anesthesia (usually neuromuscular blockage) Lungs, Thorax, or Respiration - Dyspnea]

Triethylenetetramine :

RTECS Number: YE6650000

Eye: Eye - Rabbit Standard Draize test.: 49 mg
Eye - Rabbit Standard Draize test.: 20 mg/24H

Skin: Administration onto the skin - Rabbit LD50: 805 mg/kg [Details of toxic effects not reported other than lethal dose value]
Administration onto the skin - Rabbit Open irritation test: 490 mg
Administration onto the skin - Rabbit Standard Draize test.: 5 mg/24H
Administration onto the skin - Guinea pig TDLo: 3667 mg/kg [Reproductive - Effects on Embryo or Fetus - Fetal death]

Ingestion: Oral - Rat LD50: 2500 mg/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Mouse LD50: 38.5 mg/kg [Details of toxic effects not reported other than lethal dose value]

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

RCRA Number: None.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name: Non regulated.

DOT UN Number: N/A

DOT Hazard Class: Not applicable.

DOT Packing Group: Not applicable.

SECTION 15 : REGULATORY INFORMATION

Barium sulfate :

TSCA Inventory Status: Listed

Massachusetts: Listed

Pennsylvania: Listed

Canada DSL: Listed

Polyamide of tall-oil fatty acid dimers and tetraethylenepentamine :

TSCA Inventory Status: Listed

Canada DSL: Listed

2,4,6-Tris (Dimethylaminomethyl)phenol :

TSCA Inventory Status: Listed

Canada DSL: Listed

Dimer/TOFA, reaction products with TETA :

TSCA Inventory Status: Listed

Canada DSL:	Listed

Triethylenetetramine :

TSCA Inventory Status:	Listed
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2B; D2A All components of this product are on the Canadian Domestic Substances List.

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard:	3*
HMIS Fire Hazard:	1
HMIS Reactivity:	1
HMIS Personal Protection:	x

SDS Revision Date:	December 30, 2012
SDS Format:	According to ANSI Z400.1-2004
MSDS Author:	Actio Corporation

Disclaimer: This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.

Component A - SDS

SECTION 1 : IDENTIFICATION

Product identifier used on the label:

Product Name: **FASMETAL 10 HVAC REPAIR RESIN**

Other means of identification:

Synonyms: None.

Recommended use of the chemical and restrictions on use:

Product Use/Restriction: Not applicable.

Chemical manufacturer address and telephone number:

Manufacturer Name: ITW

Address: 30 Endicott Street
Danvers, MA 01923

General Phone Number: (978) 777-1100

Emergency phone number:

Emergency Phone Number: (800) 424-9300

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:

Signal Word: WARNING.

GHS Class:
Eye Irritation. Category 2.
Skin Irritation. Category 2.
Skin Sensitization. Category 1.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements:
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.

Precautionary Statements:
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - Specific treatment (see ... on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.
Skin:	Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation:	Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.
Ingestion:	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects:	Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms:	Overexposure can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Bisphenol A diglycidyl ether resin	25068-38-6	46.1 - 50.9 by weight	
Aluminum flake	7429-90-5	22.8 - 25.2 by weight	
Calcium Carbonate	1317-65-3	22.2 - 24.6 by weight	
Synthetic amorphous silica	112945-52-5	1.9 - 2.1 by weight	
Crystalline silica	14808-60-7	0.1 - 1 by weight	

SECTION 4 : FIRST AID MEASURES

Description of necessary measures:

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media:	Use carbon dioxide (CO_2) or dry chemical when fighting fires involving this material.
Unsuitable extinguishing media:	Water or foam may cause frothing.
Unusual Fire Hazards:	Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization. Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 500 deg F may cause polymerization.

Special protective equipment and precautions for fire-fighters:

Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent)

and full protective gear.

Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personnel Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures:	Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in Section 8.

Reference to other sections:

Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
Hygiene Practices:	Wash thoroughly after handling.
Special Handling Procedures:	Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product.

Conditions for safe storage, including any incompatibilities:

Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Aluminum flake :

Guideline ACGIH:	TLV-TWA: 1 mg/m3 Respirable fraction (R) TLV-TWA: 1 mg/m3 Respirable fraction (R) TLV-TWA: 1 mg/m3 (R)
Guideline OSHA:	PEL-TWA: 15 mg/m3 Total particulate/dust (T) PEL-TWA: 5 mg/m3 Respirable fraction (R)

Crystalline silica :

Guideline ACGIH:	TLV-TWA: 0,025 mg/m3 (R)

Appropriate engineering controls:

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection:	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.
Skin Protection Description:	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
Respiratory Protection:	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Other Protective:	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.
Notes :	Only established PEL and TLV values for the ingredients are listed.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance:	Paste.
Color:	Gray
Odor:	Slight, odor.

Boiling Point:	>500°F (260°C)
Melting Point:	Not determined.
Specific Gravity:	1.64
Solubility:	negligible.
Vapor Density:	>1 (air = 1)
Vapor Pressure:	0.03 mmHg @171°F
Percent Volatile:	0
Evaporation Rate:	<<1 (butyl acetate = 1)
pH:	Neutral.
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	>400°F (204.4°C)
Flash Point Method:	Pensky-Martens Closed Cup
Lower Flammable/Explosive Limit:	Not determined.
Upper Flammable/Explosive Limit:	Not determined.
Auto Ignition Temperature:	Not determined.
VOC Content:	0 g/L

9.2. Other information:

Percent Solids by Weight	100

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability:	Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization:	Not reported.

Conditions To Avoid:

Conditions to Avoid:	Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Heating resin above 300 F in the presence of air may cause slow oxidative decomposition.

Incompatible Materials:

Incompatible Materials:	Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).

SECTION 11 : TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Bisphenol A diglycidyl ether resin :

Eye:	Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild] Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate] Administration into the eye - Rabbit Standard Draize test: 5 mg/24H [Severe] (RTECS)
Skin:	Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 mL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: >1200 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 10700 uL/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 13600 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Rat LD50 - Lethal dose, 50 percent kill: 13.6 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 11.4 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: >1 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50 - Lethal dose, 50 percent kill: 11400 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic (RTECS)

Synthetic amorphous silica :

Ingestion:	Oral - Rat LD50 - Lethal dose, 50 percent kill: 3160 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Crystalline silica :

Chronic Effects:	Long term exposure to crystalline silica may cause silicosis or lung cancer. Although normal application procedures for this product pose minimal hazard as to the release of crystalline silica dust, grinding or sanding cured product may generate some respirable crystalline silica.

Carcinogenicity:	Crystalline silica in the form of quartz or cristobalite dust causes cancer of the lung.

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
RCRA Number:	Not determined.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Refer to Bill of Lading
DOT UN Number:	Refer to Bill of Lading
IATA Shipping Name:	Refer to Bill of Lading
IATA UN Number:	Refer to Bill of Lading
IMDG UN NUmber :	Refer to Bill of Lading
IMDG Shipping Name :	Refer to Bill of Lading

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Bisphenol A diglycidyl ether resin :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Aluminum flake :

TSCA Inventory Status:	Listed
Section 313:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
Canada DSL:	Listed

Calcium Carbonate :

TSCA Inventory Status:	Listed

Synthetic amorphous silica :

Canada DSL:	Listed

Crystalline silica :

TSCA Inventory Status:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2B; D2A All components of this product are on the Canadian Domestic Substances List.
WHMIS Pictograms:	

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard:	2*
HMIS Fire Hazard:	1
HMIS Reactivity:	1
HMIS Personal Protection:	X

Health Hazard	2*
Fire Hazard	1
Reactivity	1
Personal Protection	X

* Chronic Health Effects

SDS Revision Date: May 19, 2015

MSDS Revision Notes:	GHS Update
SDS Format:	In accordance to OSHA GHS 1910.1200
MSDS Author:	Actio Corporation
Disclaimer:	The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW Polymers Adhesives, NA, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Polymers Adhesives, NA product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Polymers Adhesives, NA product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Polymers Adhesives, NA product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Polymers Adhesives, NA provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ITW Polymers Adhesives, NA makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from ITW Polymers Adhesives, NA