(M)SDS Format : ANSI

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MSDS Name	**DEVCON® Deep Pour Grout™**
Manufacturer Name	ITW Polymers Adhesives, North America
Stock No.:	13800
Kit MSDS Revision Date	12/30/2012

Components	
	DEEP POUR GROUT POWDER
	DP HARDENER COMPOUND
	DEEP POUR GROUT RESIN
ITW Polymers Adhesives, North America Product Code : 13800	

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**DEEP POUR GROUT POWDER**
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
MSDS Revision Date:	12/30/2012

HMIS

Health Hazard	1*
Fire Hazard	0
Reactivity	0
Personal Protection	x

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Non-hazardous ingredients.	N/A	60 - 100 by weight
Dolomite	16389-88-1	30 - 60 by weight
Crystalline silica	14808-60-7	0.1 - 1 by weight
Magnesite	546-93-0	1 - 5 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	CAUTION! Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	May cause irritation.
Skin:	May cause irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated contact may cause skin irritation.
Signs/Symptoms:	Overexposure may cause headaches and dizziness.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system.
Aggravation of Pre-Existing Conditions:	None generally recognized.

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:	Not determined.
Auto Ignition Temperature:	Not determined.
Lower Flammable/Explosive Limit:	Not applicable.
Upper Flammable/Explosive Limit:	Not applicable.
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.
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

Spill Cleanup Measures:	Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. 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 dust. Ventilate area. Use proper personal protective equipment as listed in section 8.
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.
Other Precautions:	Pump or shovel to storage/salvage vessels.

SECTION 7 : HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing dust or particulates.
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.
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

Crystalline silica:	
Guideline ACGIH:	0.025 mg/m3 TLV-TWA: 0.025 mg/m3 Respirable fraction (R)
Guideline OSHA:	[10 mg/m3]/[{% SiO2} + 2]
Magnesite:	
Guideline ACGIH:	
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:	Powder..
Color:	White.
Odor:	Negligible.
Boiling Point:	Not determined.
Melting Point:	1799°F (981.6°C)
Specific Gravity:	2.71
Solubility:	negligible.
Vapor Density:	Not determined.
Vapor Pressure:	Not determined.
Percent Volatile:	0
Evaporation Rate:	Not determined.
pH:	Not determined.
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	Not determined.
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:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 : TOXICOLOGICAL INFORMATION

Crystalline silica:

RTECS Number:	VV7330000
Carcinogenicity:	IARC: Group 1: Carcinogenic to humans. NTP: Reasonably anticipated to be a human carcinogen.

Magnesite:

RTECS Number:	OM2470000
Ingestion:	Oral - Mouse LD50: 7000 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50: 8000 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

Dolomite :

TSCA Inventory Status:	Listed
Canada NDSL:	Listed

Crystalline silica :

TSCA Inventory Status:	Listed
Massachusetts:	Listed

Pennsylvania:	Listed
Canada DSL:	Listed
Magnesite :	
TSCA Inventory Status:	Listed
Massachusetts:	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 Fire Hazard:	0
HMIS Health Hazard:	1*
HMIS Reactivity:	0
HMIS Personal Protection:	x
MSDS Revision Date:	12/30/2012
MSDS Author:	Actio Corporation

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**DP HARDENER COMPOUND**
MSDS Manufacturer Number:	1561
Manufacturer Name:	ITW
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
MSDS Revision Date:	12/30/2012

HMIS

Health Hazard	3*
Fire Hazard	1
Reactivity	0
Personal Protection	X

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Diethylenetriamine	111-40-0	5 - 10 by weight
Undisclosed/Proprietary	Proprietary	30 - 60 by weight
Polyoxypropylenediamine	9046-10-0	10 - 30 by weight
Aminoethylethanol Amine	111-41-1	10 - 30 by weight
Bisphenol A	80-05-7	10 - 30 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	DANGER! Corrosive. Toxic. Potential Sensitizer Irritant.
Route of Exposure:	Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:	
Eye:	Corrosive. Will cause eye burns, permanent tissue damage, and blindness.
Skin:	Contact causes severe skin irritation and possible burns. 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:	May cause severe respiratory system irritation. May cause respiratory sensitization with asthma-like symptoms in susceptible individuals.
Ingestion:	Harmful if swallowed. Corrosive to the gastrointestinal tract.
Chronic Health Effects:	Prolonged skin contact causes burns. Repeated or prolonged inhalation may cause toxic effects.
Signs/Symptoms:	Depending on solution concentration, material may be corrosive to skin, mucous membranes and eyes. Vapors may cause respiratory irritation.
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.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties:	Class III B.
Flash Point:	220°F (93°C)
Flash Point Method:	PMCC
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

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. Corrosive. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective equipment as listed in section 8.
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.
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. Avoid contact with eyes and skin. Do not reuse containers without proper cleaning or reconditioning.
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:	Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
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

Diethylenetriamine:

Guideline ACGIH:	1 ppm Skin: Yes. TLV-TWA: 1 ppm
Notes :	Only established PEL and TLV values for the ingredients are listed.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Liquid.
Color:	Amber.
Odor:	Ammonia like.
Boiling Point:	390°F (199°C)
Melting Point:	Not determined.
Specific Gravity:	1.02
Solubility:	completely soluble.
Vapor Density:	3.56 (air = 1)
Vapor Pressure:	<1 mmHg @20°C 68°F
Evaporation Rate:	Not determined.
pH:	alkaline
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	220°F (93°C)
Flash Point Method:	PMCC
Auto Ignition Temperature:	Not determined.
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. Product may slowly corrode copper, aluminum, zinc and galvanized surfaces.
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

Diethylenetriamine:

RTECS Number:	IE1225000
Skin:	Administration onto the skin - Rabbit : 1090 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Guinea pig : 170 uL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 500 mg Administration onto the skin - Rabbit : 500 mg
Ingestion:	Oral - Rat LD50: 1080 mg/kg [Behavioral - Convulsions or effect on seizure threshold]

Polyoxypropylenediamine:

RTECS Number:	TR3702500
Eye:	Eye - Rabbit Standard Draize test.: 100 mg [severe]
Skin:	Administration onto the skin - Rabbit LD50 : 360 mg/kg [Lungs, Thorax, or Respiration - Other changes Blood - Hemorrhage Skin and Appendages - Dermatitis, other (After systemic exposure)]
Ingestion:	Oral - Rat LD50 : 242 mg/kg [Behavioral - Convulsions or effect on seizure threshold Gastrointestinal - Ulceration or bleeding from stomach Blood - Hemorrhage]

Aminoethylethanol Amine:

RTECS Number:	KJ6300000
Eye:	Eye - Rabbit Standard Draize test. : 50 mg [severe]
Skin:	Administration onto the skin - Rat : 2250 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 3560 uL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Guinea pig : 1800 uL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 10 mg/24H Administration onto the skin - Rabbit : 445 mg
Ingestion:	Oral - Rat LD50 : 3 gm/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50 : 3550 mg/kg [Details of toxic effects not reported other than lethal dose value]

Bisphenol A:

RTECS Number:	SL6300000
Eye:	Eye - Rabbit Standard Draize test.: 250 ug/24H
Skin:	Administration onto the skin - Rabbit : 3 mL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 250 mg Administration onto the skin - Rabbit : 500 mg/24H Administration onto the skin - Rabbit : 10 %/2D (Intermittent)

Ingestion:	Oral - Rat LD50: 3250 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50: 2400 mg/kg [Autonomic Nervous System - Other (direct) parasympathomimetic Behavioral - Convulsions or effect on seizure threshold Behavioral - Ataxia] Oral - Rat LD50: 1200 mg/kg [Reproductive - Fertility - female fertility index (e.g., number females pregnant per number sperm positive females; number females pregnant per number females mated)] Oral - Mouse LD50: 2500 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Rat LD50: 4240 mg/kg [Kidney/Ureter/Bladder - Other changes in urine composition] Oral - Mouse LD50: 2500 mg/kg [Brain and Coverings - Changes in circulation (Hemorrhage, thrombosis, etc.) Liver - Fatty liver degeneration Liver - Other changes] Oral - Mouse LD50: 2500 mg/kg [Lungs, Thorax, or Respiration - Dyspnea Lungs, Thorax, or Respiration - Other changes]

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.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Refer to Bill of Lading
DOT UN Number:	Refer to Bill of Lading

SECTION 15 : REGULATORY INFORMATION

Diethylenetriamine :	
TSCA Inventory Status:	Listed
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Polyoxypropylenediamine :	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Aminoethylethanol Amine :	
TSCA Inventory Status:	Listed
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Canada IDL:	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.67(212)
Bisphenol A :	
TSCA Inventory Status:	Listed
SARA:	EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
New Jersey:	Listed: NJ Hazardous List; Substance Number: 2388
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2A; D2B; E All components of this product are on the Canadian Domestic Substances List.

WHMIS Pictograms

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard:	1
HMIS Health Hazard:	3*
HMIS Reactivity:	0
HMIS Personal Protection:	X
MSDS Revision Date:	12/30/2012

MSDS Revision Notes:	"Formula update"
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.

SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**DEEP POUR GROUT RESIN**
MSDS Manufacturer Number:	0032
Manufacturer Name:	ITW
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
MSDS Revision Date:	12/30/2012

HMIS

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

* Chronic Health Effects

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Bisphenol A diglycidyl ether resin	25068-38-6	60 - 100 by weight
Butyl glycidyl ether	2426-08-6	10 - 30 by weight
Phosphated polyester	Proprietary	1 - 5 by weight
Carbon black	1333-86-4	0.1 - 1 by weight

SECTION 3 : HAZARDS IDENTIFICATION

Emergency Overview:	WARNING! Combustible. Harmful. Potential Sensitizer Irritant.
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. 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 can cause headaches, dizziness, nausea, and vomiting.
Target Organs:	Eyes. Skin. Respiratory system. Digestive system. Reproductive 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.
Other First Aid:	Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties:	Combustible. Class II.
Flash Point:	>160°F (71.1°C)
Flash Point Method:	Estimated.
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.
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.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

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. Combustible, eliminate ignition sources. At elevated temperatures, vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment as listed in section 8.
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.
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, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use.
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

Butyl glycidyl ether:

Guideline ACGIH:	3 ppm Sensitizer.: Sen Skin: Yes. TLV-TWA: 3 ppm
Guideline OSHA:	50 ppm

	PEL-TWA: 50 ppm
Carbon black:	
Guideline ACGIH:	3.5 mg/m3 TLV-TWA: 3.5 mg/m3
Notes :	Only established PEL and TLV values for the ingredients are listed.

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Viscous. Liquid.
Odor:	Slight. odor.
Boiling Point:	>300°F (148.8°C)
Melting Point:	Not determined.
Specific Gravity:	1.13
Solubility:	negligible.
Vapor Density:	4.5 (air = 1)
Vapor Pressure:	< 1 mmHg @70°F
Percent Volatile:	Not determined.
Evaporation Rate:	Not determined.
pH:	Neutral.
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Flash Point:	>160°F (71.1°C)
Flash Point Method:	Estimated.
Auto Ignition Temperature:	Not determined.
VOC Content:	Not determined.
Percent Solids by Weight	Not determined.

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. Heating resin above 300 F in the presence of air may cause slow oxidative decomposition.
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

Bisphenol A diglycidyl ether resin:	
RTECS Number:	SL6480000
Skin:	Administration onto the skin - Rat LD : >2 gm/kg [Nutritional and Gross Metabolic - Other changes]
Butyl glycidyl ether:	
RTECS Number:	TX4200000
Eye:	Eye - Rabbit Standard Draize test.: 91 mg Eye - Rabbit Standard Draize test.: 750 ug/24H
Skin:	Administration onto the skin - Rat : >2150 mg/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rabbit : 2520 uL/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Mouse : 36 gm/kg [Reproductive - Effects on Embryo or Fetus - fetal death] Administration onto the skin - Rabbit : 454 mg/3D Administration onto the skin - Rabbit : 20 mg/24H
Inhalation:	Inhalation - Rat LC50: 1030 ppm/8H [Sense Organs and Special Senses (Eye) - Lacrimation Gastrointestinal - Changes in structure or function of salivary glands Lungs, Thorax, or Respiration - Dyspnea] Inhalation - Mouse LC50: 260 mg/m3 [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Lungs, Thorax, or Respiration - Respiratory depression]
Ingestion:	Oral - Rat LD50: 1660 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Lungs, Thorax, or Respiration - Respiratory depression] Oral - Mouse LD50: 1530 mg/kg [Brain and Coverings - Recordings from specific areas of CNS Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia]
Carbon black:	
RTECS Number:	FF5800000
Skin:	Administration onto the skin - Rabbit : >3 gm/kg [Details of toxic effects not reported other than lethal dose value] Administration onto the skin - Rat : 11 gm/kg/4W (Intermittent) [Blood - Pigmented or nucleated red blood cells Liver - Changes in liver weight Nutritional and Gross Metabolic - Weight loss or decreased weight gain]
Ingestion:	Oral - Rat LD50: >15400 mg/kg [Behavioral - Somnolence (general depressed activity)]
Carcinogenicity:	IARC: Group 2B: Possibly carcinogenic to humans.

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:	Not determined.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Non regulated.
DOT UN Number:	Not applicable.
DOT Hazard Class:	Not applicable.
DOT Packing Group:	Not applicable.

SECTION 15 : REGULATORY INFORMATION

Bisphenol A diglycidyl ether resin :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Butyl glycidyl ether :

TSCA Inventory Status:	Listed
Massachusetts:	Listed
Canada DSL:	Listed

Carbon black :

TSCA Inventory Status:	Listed
California PROP 65:	Listed: cancer.
Massachusetts:	Listed
Pennsylvania:	Listed
Canada DSL:	Listed
Canadian Regulations.	WHMIS Hazard Class(es): D2B; B3

WHMIS Pictograms

SECTION 16 : ADDITIONAL INFORMATION

HMIS Fire Hazard:	2
HMIS Health Hazard:	2*
HMIS Reactivity:	1
HMIS Personal Protection:	X
MSDS Revision Date:	12/30/2012
MSDS Revision Notes:	"Formula update"
MSDS Author:	Actio Corporation
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