



Kit Name: **DEVCON® Plastic Steel® Liquid (B)**  
Stock No.: 10220  
Manufacturer Name: ITW Polymers Adhesives, North America  
Address: 30 Endicott Street  
Danvers, MA 01923

Component list	
Component A	PLASTIC STEEL LIQUID (B) RESIN
Component B	ALUMINUM LIQUID (F-2) HARDENER
Kit SDS Revision Date	09/10/2015

### SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: **PLASTIC STEEL LIQUID (B) RESIN**  
Synonyms: None.  
Product Use/Restriction: Not applicable.  
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

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

\* Chronic Health Effects

### SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent
Silicon	7440-21-3	9.9 - 11 by weight
Iron	7439-89-6	48.6 - 53.7 by weight
Bisphenol A diglycidyl ether resin	25068-38-6	30.5 - 33.7 by weight
Titanium	7440-32-6	3.1 - 3.4 by weight
Aluminum flake	7429-90-5	1.2 - 1.3 by weight

### SECTION 3 : HAZARDS IDENTIFICATION

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 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.

<b>Skin Contact:</b>	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.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	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

<b>Flash Point:</b>	>400°F (204.4°C)
<b>Flash Point Method:</b>	Pensky-Martens Closed Cup
<b>Auto Ignition Temperature:</b>	Not determined.
<b>Lower Flammable/Explosive Limit:</b>	Not determined.
<b>Upper Flammable/Explosive Limit:</b>	Not determined.
<b>Fire Fighting Instructions:</b>	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.
<b>Extinguishing Media:</b>	Use carbon dioxide (CO <sub>2</sub> ) or dry chemical when fighting fires involving this material.
<b>Unsuitable Media:</b>	Water or foam may cause frothing.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Unusual Fire Hazards:</b>	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

<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Spill Cleanup Measures:</b>	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.
<b>Other Precautions:</b>	Pump or shovel to storage/salvage vessels.

## SECTION 7 : HANDLING and STORAGE

<b>Handling:</b>	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.
<b>Storage:</b>	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use.
<b>Special Handling Procedures:</b>	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.
<b>Hygiene Practices:</b>	Wash thoroughly after handling.

## SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

<b>Engineering Controls:</b>	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.
<b>Eye/Face Protection:</b>	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.
<b>Skin Protection Description:</b>	Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.
<b>Respiratory Protection:</b>	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.
<b>Other Protective:</b>	Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

### EXPOSURE GUIDELINES

#### **Silicon :**

**Guideline OSHA:** PEL-TWA: 15 mg/m<sup>3</sup> Total particulate/dust (T)

	PEL-TWA: 5 mg/m <sup>3</sup> Respirable fraction (R)
<b>Aluminum flake :</b>	
<b>Guideline ACGIH:</b>	TLV-TWA: 1 mg/m <sup>3</sup> Respirable fraction (R) TLV-TWA: 1 mg/m <sup>3</sup> Respirable fraction (R) TLV-TWA: 1 mg/m <sup>3</sup> (R)
<b>Guideline OSHA:</b>	PEL-TWA: 15 mg/m <sup>3</sup> Total particulate/dust (T) PEL-TWA: 5 mg/m <sup>3</sup> Respirable fraction (R)
<b>Notes :</b>	Only established PEL and TLV values for the ingredients are listed.

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

<b>Physical State Appearance:</b>	Viscous. Liquid.
<b>Color:</b>	Dark Gray
<b>Odor:</b>	Slight. odor.
<b>Boiling Point:</b>	>500°F (260°C)
<b>Melting Point:</b>	Not determined.
<b>Specific Gravity:</b>	2.8
<b>Solubility:</b>	negligible.
<b>Vapor Density:</b>	>1 (air = 1)
<b>Vapor Pressure:</b>	0.03 mmHg @171°F
<b>Percent Volatile:</b>	0
<b>Evaporation Rate:</b>	<<1 (butyl acetate = 1)
<b>pH:</b>	Neutral.
<b>Molecular Formula:</b>	Mixture
<b>Molecular Weight:</b>	Mixture
<b>Flash Point:</b>	>400°F (204.4°C)
<b>Flash Point Method:</b>	Pensky-Martens Closed Cup
<b>Auto Ignition Temperature:</b>	Not determined.
<b>VOC Content:</b>	0 g/L
<b>Percent Solids by Weight</b>	100

## SECTION 10 : STABILITY and REACTIVITY

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures.
<b>Hazardous Polymerization:</b>	Not reported.
<b>Conditions to Avoid:</b>	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.
<b>Incompatible Materials:</b>	Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).

## SECTION 11 : TOXICOLOGICAL INFORMATION

### Silicon :

<b>Eye:</b>	Administration into the eye - Rabbit Standard Draize test: 3 mg [Mild] (RTECS)
<b>Ingestion:</b>	Oral - Rat LD50 - Lethal dose, 50 percent kill: 3160 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

### Iron :

<b>Ingestion:</b>	Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Nutritional and Gross Metabolic - Weight loss or decreased weight gain] Oral - Rat LD50 - Lethal dose, 50 percent kill: 750 mg/kg [Blood - Changes in serum composition (e.g., TP, bilirubin, cholesterol) Biochemical - Enzyme inhibition, induction, or change in blood or tissue levels - Transaminases] (RTECS)
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### Bisphenol A diglycidyl ether resin :

<b>Eye:</b>	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)
<b>Skin:</b>	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)
<b>Ingestion:</b>	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)

## 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

### Silicon :

**TSCA Inventory Status:** Listed  
**Canada DSL:** Listed

### Iron :

**TSCA Inventory Status:** Listed  
**Canada DSL:** Listed

### Bisphenol A diglycidyl ether resin :

**TSCA Inventory Status:** Listed  
**Canada DSL:** Listed

### Titanium :

**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  
**Canadian Regulations:** WHMIS Hazard Class(es): D2B  
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

**SDS Revision Date:** May 19, 2015  
**MSDS Revision Notes:** GHS Update  
**SDS Format:** According to ANSI Z400.1-2004  
**MSDS Author:** Actio Corporation

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## SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** ALUMINUM LIQUID (F-2) HARDENER  
**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

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
Aliphatic Amines	No Data	47.5 - 52.5 by weight
Triethylenetetramine	112-24-3	23.7 - 26.2 by weight
Benzyl alcohol	100-51-6	23.7 - 26.2 by weight

## SECTION 3 : HAZARDS IDENTIFICATION

**Route of Exposure:** Eyes. Skin. Inhalation. Ingestion.  
**Potential Health Effects:**  
**Eye:** Corrosive. Will cause eye burns, permanent tissue damage, and blindness.  
**Skin:** Corrosive causes severe skin 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 eye(s) with plenty of water. Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care If medical care is not promptly available, continue to irrigate for one hour  
**Skin Contact:** Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay Initiate and maintain continuous irrigation until the patient receives medical care If medical care is not promptly available, continue to irrigate for one hour  
**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.

Note to Physicians:

Application of corticosteroid cream has been effective in treating skin irritation

Other First Aid:

Eye disease Skin disorders and allergies Neurological disorders.

## SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	>200°F (93.3°C)
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:	Alcohol resistant foam, carbon dioxide, dry chemical, dry sand, and limestone powder
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:	May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Incomplete combustion may form carbon monoxide. Downstream personnel must be evacuated.
Hazardous Combustion Byproducts:	Burning produces noxious and toxic fumes.

## 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. Corrosive. 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. Avoid contact with eyes and skin. Do not reuse containers without proper cleaning or reconditioning. When using, do not eat, drink or smoke.
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.
Hand Protection Description:	Neoprene gloves. Butyl rubber. Nitrile rubber. Impervious gloves.
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

[Triethylenetetramine](#) :

Guideline Type: WEEL  
Guideline Info: TWA 10 ppm (44.2 mg/m3)  
**Benzy alcohol:**  
Guideline Type: WEEL  
Guideline Info: TWA 1 ppm (6 mg/m3)  
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: Amine odor.  
Boiling Point: 421 °F (216 °C)  
Melting Point: Not determined.  
Specific Gravity: 0.97 at 70 °F (21.1 °C)  
Solubility: completely miscible.  
Vapor Density: Not determined.  
Vapor Pressure: 4.31 mmHg at 70 °F (21.1 °C)  
Percent Volatile: Not determined.  
Evaporation Rate: Not determined.  
pH: alkaline  
Viscosity: 200 - 400 mPa.s at 70 °F (21.1 °C)  
Flash Point: >200°F (93.3°C)  
Auto Ignition Temperature: Not determined.  
VOC Content: 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: Oxidizing agents, mineral acids, organic acids (i.e. acetic acid, citric acid, etc.) sodium hypochlorite, reactive metals (e.g. sodium, calcium, zinc, etc.), materials reactive with hydroxyl compounds. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reactions with peroxides may result in violent decomposition of peroxide possibly creating an explosion.  
Special Decomposition Products: Nitric acid , Oxides of carbon and nitrogen, aldehydes and ammonia. Nitrogen oxide can react with water vapors to form corrosive nitric acid. Flammable hydrocarbon fragments.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### **Triethylenetetramine :**

Eye: Administration into the eye - Rabbit Standard Draize test: 49 mg [Severe]  
Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate] (RTECS)  
Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 805 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)  
Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 2500 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

### **Benzy alcohol :**

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 2000 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)  
Inhalation: Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: >500 mg/m3 [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)  
Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 1230 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Behavioral - Coma]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 1660 mg/kg [Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Lungs, Thorax, or Respiration - Respiratory depression]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 1.5 mL/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

## 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:** Refer to Bill of Lading

**DOT UN Number:** Refer to Bill of Lading

## SECTION 15 : REGULATORY INFORMATION

### Triethylenetetramine :

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

### Benzyl alcohol :

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Canadian Regulations:** WHMIS Hazard Class(es): D1B; E; D2B  
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 Creation Date:** September 12, 2014

**SDS Revision Date:** July 25, 2015

**MSDS Revision Notes:** GHS Update

**SDS Format:** According to ANSI Z400.1-2004

**MSDS Author:** Actio Corporation

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