

Kit Name Stock No.: Manufacturer Name: Address:

#### DEVCON® FasMetal™ 10780 ITW Polymers Adhesives, North America 30 Endicott Street Danvers, MA 01923

|                       | Component list                           |
|-----------------------|------------------------------------------|
| Component B           | FASMETAL RESIN                           |
| Component A           | PLASTIC STEEL 5-MIN. PUTTY (SF) HARDENER |
| Kit SDS Revision Date | 07/30/2015                               |

## SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

| Product Name:            |
|--------------------------|
| Synonyms:                |
| Product Use/Restriction: |
| Manufacturer Name:       |
| Address:                 |

General Phone Number:

CHEMTREC:

Emergency Phone Number:

FA SMETAL RESIN

None. Not applicable. ITW 30 Endicott Street Danvers, MA 01923 (978) 777-1100 (800) 424-9300 For emergencies in the US, call CHEMTREC: 800-424-9300



## SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                      | CA S#      | Ingredient Percent    |
|------------------------------------|------------|-----------------------|
| Bisphenol A diglycidyl ether resin | 25068-38-6 | 46.5 - 51.4 by weight |
| Aluminum oxide                     | 1344-28-1  | 42.8 - 47.3 by weight |
| Amorphous silicon dioxide          | 67762-90-7 | 3.4 - 3.7 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<br>possible.<br>May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this<br>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<br>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 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<br>contaminated clothing and shoes.<br>Get medical attention if irritation develops or persists. |

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:                     | >400°F (204.4°C)                                                                                                                                                                                                                              |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flash Point Method:              | Pensky-Martens Closed Cup                                                                                                                                                                                                                     |
| 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

| 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.<br>Provide ventilation. Clean up spills immediately observing precautions in the protective equipment<br>section. After removal, flush spill area with soap and water to remove trace residue.<br>Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective<br>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.                                                                            |
| Special Handling Procedures: | Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10)<br>during welding/flame cutting operations and to protect against dust during sanding/grinding of cured<br>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<br>permissible under certain circumstances where airborne concentrations are expected to exceed<br>exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air<br>supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known,<br>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          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <u>Aluminum oxide</u> :      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Guideline OSHA:              | PEL-TWA: 5 mg/m3 Respirable fraction (R)<br>PEL-TWA: 15 mg/m3 Total particulate/dust (T)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Notes:                       | Only established PEL and TLV values for the ingredients are listed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## SECTION 9 : 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:          | 1.7                       |
| 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 |
| 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.<br>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 : |
|--------------------------------------|
|                                      |

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

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

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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                                                                                                      |
| Aluminum oxide :                   |                                                                                                             |
| TSCA Inventory Status:             | Listed                                                                                                      |
| Section 313:                       | EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.                                     |
| Canada DSL:                        | Listed                                                                                                      |
| Amorphous silicon dioxide :        |                                                                                                             |
| TSCA Inventory Status:             | Listed                                                                                                      |
| Canada DSL:                        | Listed                                                                                                      |
| Canadian Regulations.              | WHMIS Hazard Class(es): D2B<br>All components of this product are on the Canadian Domestic Substances List. |
| WHMIS Pictograms:                  | $\bigcirc$                                                                                                  |

## SECTION 16 : ADDITIONAL INFORMATION

| ·                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HMIS Ratings:             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| HMIS Health Hazard:       | 2*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| HMIS Fire Hazard:         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| HMIS Reactivity:          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| HMIS Personal Protection: | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| SDS Revision Date:        | January 30, 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| MSDS Revision Notes:      | GHS Update                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| SDS Format:               | According to ANSI Z400.1-2004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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 product to make a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, information obtained from a database may not be as current as the information in the MSDS available directly from ITW Polymers Adhesives, NA |

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## SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

|                          |                                          | HMIS          |          |
|--------------------------|------------------------------------------|---------------|----------|
| Product Name:            | PLASTIC STEEL 5-MIN. PUTTY (SF) HARDENER | Health Hazard | 3*       |
| Synonyms:                | None.                                    |               |          |
| Product Use/Restriction: | Not applicable.                          | Fire Hazard   | 1        |
| Manufacturer Name:       | ITW                                      | Reactivity    | 1        |
| Address:                 | 30 Endicott Street<br>Danvers, MA 01923  | Personal      | x        |
| General Phone Number     | (978) 777-1100                           | Protection    | <u> </u> |

## SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                          | CA S#      | Ingredient Percent    |
|----------------------------------------|------------|-----------------------|
| Tris-2,4,6-(dimethylaminomethyl)phenol | 90-72-2    | 9.8 - 10.8 by weight  |
| Amorphous silicon dioxide              | 67762-90-7 | 4 - 4.4 by weight     |
| Proprietary component(s)               | No Data    | 39.2 - 43.3 by weight |
| Calcium Carbonate                      | 1317-65-3  | 37.1 - 41 by weight   |
| Titanium dioxide                       | 13463-67-7 | 2.2 - 2.4 by weight   |
| Crystalline silica                     | 14808-60-7 | 0.1 - 1 by weight     |
|                                        |            |                       |

## SECTION 3 : HAZARDS IDENTIFICATION

| Eyes. Skin. Inhalation. Ingestion.                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                  |
| Can cause severe eye irritation and burns. Eye contact may cause permanent damage or blindness.                                                                                                                  |
| Causes severe skin irritation. May cause permanent skin damage. Allergic reactions are possible.<br>May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this<br>material. |
| Vapor or mist may cause severe respiratory system irritation.                                                                                                                                                    |
| Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.                                                                                                       |
| Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.                                                                                          |
| Overexposure may cause eye watering or discomfort, redness and swelling.                                                                                                                                         |
| Eyes. Skin. Respiratory system. Digestive system.                                                                                                                                                                |
| 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<br>contaminated clothing and shoes.<br>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

| Flammable Properties:            | Class III B.                                                                                                                                                                                                                      |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flash Point:                     | >200°F (93.3°C)                                                                                                                                                                                                                   |
| Flash Point Method:              | Pensky-Martens Closed Cup                                                                                                                                                                                                         |
| 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.<br>Provide ventilation. Clean up spills immediately observing precautions in the protective equipment<br>section. After removal, flush spill area with soap and water to remove trace residue.<br>Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective<br>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)<br>during welding/flame cutting operations and to protect against dust during sanding/grinding of cured<br>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<br>engineering controls to control airborne levels below recommended exposure limits. Good general<br>ventilation should be sufficient to control airborne levels. Where such systems are not effective wear<br>suitable personal protective equipment, which performs satisfactorily and meets OSHA or other<br>recognized standards. Consult with local procedures for selection, training, inspection and maintenance<br>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<br>permissible under certain circumstances where airborne concentrations are expected to exceed<br>exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air<br>supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known,<br>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          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Titanium dioxide :           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Guideline ACGIH:     | TLV-TWA: 10 mg/m3                                                   |
|----------------------|---------------------------------------------------------------------|
| Crystalline silica : |                                                                     |
| Guideline ACGIH:     | TLV-TWA: 0.025 mg/m3 (R)                                            |
| Notes :              | Only established PEL and TLV values for the ingredients are listed. |
|                      |                                                                     |

## SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

| Physical State Appearance: | Putty                     |
|----------------------------|---------------------------|
| Color:                     | Viscous. Amber.           |
| Odor:                      | Mercaptan.                |
| Boiling Point:             | Not determined.           |
| Melting Point:             | Not determined.           |
| Specific Gravity:          | > 1.1                     |
| Solubility:                | negligible.               |
| Vapor Density:             | Not determined.           |
| Vapor Pressure:            | <<1 mmHg @70°F            |
| Percent Volatile:          | 0                         |
| Evaporation Rate:          | Not determined.           |
| pH:                        | 9.5 @ 5 Percent Solution  |
| Molecular Formula:         | Mixture                   |
| Molecular Weight:          | Mixture                   |
| Flash Point:               | >200°F (93.3°C)           |
| Flash Point Method:        | Pensky-Martens Closed Cup |
| Auto Ignition Temperature: | 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.                                                                                                                           |
| Incompatible Materials:               | Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc).<br>Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites. Peroxides. Materials reactive with hydroxyl<br>compounds. |

## SECTION 11 : TOXICOLOGICAL INFORMATION

| Tris-2,4,6-(dimethylaminomethyl)phenol: |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Eye:                                    | Administration into the eye - Rabbit Standard Draize test: 50 ug/24H [Severe] (RTECS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Skin:                                   | Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: 1280 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Ingestion:                              | Oral - Rat LD50 - Lethal dose, 50 percent kill: 1200 mg/kg [Peripheral Nerve and Sensation - Flaccid<br>paralysis without anesthesia (usually neuromuscular blockage) Lungs, Thorax, or Respiration -<br>Dyspnea]<br>Oral - Rat LD50 - Lethal dose, 50 percent kill: 1673 mg/kg [Behavioral - Tremor Gastrointestinal -<br>Ulceration or bleeding from stomach Liver - Other changes] (RTECS)                                                                                                                                                                                                                                                                           |  |
| Titanium dioxide :                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Chronic Effects:                        | Normal application procedures for this product pose minimal hazard as to the release of respirable titanium dioxide dust, but grinding or sanding dried films of this product may yield some respirable titanium dioxide. Although IARC has classified titanium dioxide as possible carcinogenic to human (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products which titanium dioxide is bound to other materials". OSHA does not regulate titanium dioxide as a carcinogen. However, under 29CFR 1910.1200 the SDS must convey the fact that titanium dioxide is a potential carcinogen to rats. |  |
| Carcinogenicity:                        | Animal evidence shows that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Crystalline silica :                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Chronic Effects:                        | Long term exposure to crystalline silica may cause silicosis or lung cancer. Although normal application<br>procedures for this product pose minimal hazard as to the release of crystalline silica dust, grinding or<br>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:        | 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

### Tris-2,4,6-(dimethylaminomethyl)phenol :

TSCA Inventory Status: Listed

| Canada DSL: | Li | sted |
|-------------|----|------|
|             |    |      |

| Listed                                                                                                           |
|------------------------------------------------------------------------------------------------------------------|
| Listed                                                                                                           |
|                                                                                                                  |
| Listed                                                                                                           |
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| Listed                                                                                                           |
| Listed                                                                                                           |
|                                                                                                                  |
| Listed                                                                                                           |
| Listed                                                                                                           |
| WHMIS Hazard Class(es): D2B; D2A<br>All components of this product are on the Canadian Domestic Substances List. |
| $\bigcirc$                                                                                                       |
|                                                                                                                  |

### SECTION 16 : ADDITIONAL INFORMATION

| HMIS Ratings:             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HMIS Health Hazard:       | 3*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| HMIS Fire Hazard:         | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| HMIS Reactivity:          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| HMIS Personal Protection: | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| SDS Revision Date:        | March 17, 2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| MSDS Revision Notes:      | GHS Update                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| SDS Format:               | According to ANSI Z400.1-2004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MSDS Author:              | Actio Corporation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Disclaimer:               | The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW<br>Polymers Adhesives, NA, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT<br>LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE<br>OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the<br>ITW Polymers Adhesives, NA product is fit for a particular purpose and suitable for user's method of<br>use or application. Given the variety of factors that can affect the use and application of a ITW. |

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