

# SAFETY DATA SHEET



DATE PRINTED :	5/30/2017
MSDS REF. No :	R663-000

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 663 RAPID REPAIR PASTE RESIN V. 2012

**PRODUCT CODE:** R663-000

**Supplier/ Manufacturer**  
TRI-CHEM CORPORATION  
431 Stephenson Highway  
Troy, MI 48083  
800-456-6255

**TRI-CHEM CORPORATION PHONE:** 800-456-6255

**EMERGENCY PHONE:** 800-535-5053

**ORIGINAL DATE ISSUED:** 3/25/13 **REVISION DATE:** 7/23/15

**Recommended end use:** Half of a two component system designed for application and use as a protective coating.

## 2. HAZARDS IDENTIFICATION

**Acute Toxicity, Category 4**

**Carcinogenicity, Category 2**



**SIGNAL WORD:** Warning

**Hazard-determining components of labeling:** Bisphenol A Epoxy Resin

### Hazard Statements

H317 May cause an allergic skin reaction

H302 Harmful if swallowed

H335 May cause respiratory irritation

H351 Suspected of causing cancer

### Precautionary Statements

P273 Avoid Release to the Environment

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

P284 Wear respiratory protection

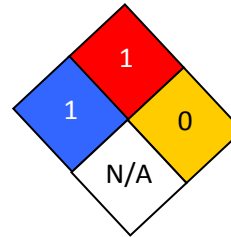
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing.

P310 Immediately Call a POISON CENTER or doctor/physician.

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## NFPA CODES

HMIS RATING	
Health :	1
Flammability :	1
Reactivity :	0
Personal Protection :	X



### Potential Health Effects:

**SKIN:** May cause irritation. Allergic reaction possible. May cause sensitization. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

**EYES:** May cause irritation. Irritation, burning, tearing, and redness.

**INHALATION:** Inhalation of vapors causes skin irritation of the respiratory tract and may cause adverse systemic effects. Headache. Nausea.

**INGESTION:** Headache. Nausea. Vomiting. Diarrhea. Mouth and throat burns.

**CHRONIC HAZARDS:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Overexposure may cause lung damage. Liver Disorders. Kidney Disorders. Adverse respiratory effects. Adverse skin effects. Adverse eye effects.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This document is a pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard. All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Chemical Name	Weight %	CAS Number
Bisphenol A Epoxy Resin	60-100%	25085-99-8
Hydrophobic Silica	1-5%	67762-90-7
Light Aromatic Naphtha Solvent	0.1-1%	64742-95-6

### 4. FIRST AID MEASURES

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to physician in attendance.

**EYES:** Hold eyelids open and flush with plenty of water for at least 20 minutes. Get Medical Attention.

**SKIN:** Contact a physician. Remove product and flush with plenty of water for at least 20-30 minutes. Wash with soap and water. Remove contaminated clothing immediately, wash before next use, and discard any items too difficult to clean.

**INGESTION:** DO NOT INDUCE VOMITING! Call a physician or poison control center immediately. Give victim a glass of water or milk. Never give anything by mouth to an unconscious person.

**INHALATION:** Consult a physician. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

### 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Dry Chemical Foam. Carbon Dioxide. Foam.

**For safety reasons, unsuitable extinguishing agents:** water spray.

**SPECIAL FIRE & UNUSUAL HAZARD:** May generate toxic or irritating combustion products. May generate phenolics. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases

**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:** Firefighters should wear butyl rubber boots, gloves and body suit as well as a self-contained breathing apparatus with NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode to protect against potentially toxic and irritating fumes.

**ADDITIONAL INFORMATION:** Remove all ignition sources. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

**HAZARDOUS COMBUSTION PRODUCTS formed under fire conditions:** carbon oxides, nitrogen oxides, phenolics

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## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Evacuate personnel to safe area. Ensure adequate ventilation.

**Environmental precautions:**

Prevent further leaking if safe to do so. Dike Spill Area. Flush area with water spray. Absorb spill with inert material (ex. dry sand or earth) and place in a chemical waste container for disposal. Avoid runoff into storm sewers and ditches which lead into waterways. Discharge into the environment must be avoided. If seepage into the environment has occurred, notify respective authorities.

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

**HANDLING:** Handle in a well ventilated workspace. Empty containers may contain explosive vapors. Flush empty containers with water to remove residual flammable liquid vapors. Ground all containers during material transfer. Avoid breathing dust, vapor or mist. Avoid contact with eyes. Avoid contact with skin or clothing.

**STORAGE:** Keep from freezing. Keep container closed when not in use. Keep container in a cool, well-ventilated place. Keep away from food, drink, and animal feed stuffs. Keep away from ignition sources and other incompatibilities. Store in original container or a container very similar to that of the original.

## 8. EXPOSURE CONTROLS\PERSONAL PROTECTION

**Ventilation:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants.

**Personal Protection Equipment:**

**Respiratory Protection:** In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended. For emergency situations use self-contained breathing apparatus with pressure demand mode.



**Skin Protection:** Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles. Gloves should be tested for chemical resistance before reliable use. (penetration times, rates of diffusion and rate of degradation). Wear long sleeves and pants, exposing as little skin as possible.



**Eye Protection:** Wear chemical safety glasses with side shields or goggles. In the event of an emergency, use eye goggles with a full face shield. DO NOT WEAR CONTACT LENSES when working with this material!!

**Hygienic Practices:** Wash hands before eating. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile Organic Content:</b> 0.0671521	<b>Solubility in Water:</b> Insoluble
<b>Color:</b> Black	<b>Specific Gravity @ 20°C:</b> 1.1709194
<b>Odor:</b> N.A.	<b>pH @ 100%:</b> N.A.
<b>Physical Appearance:</b> Black Liquid	<b>Melting/Freezing point:</b> N/A
<b>Boiling Point:</b> N/A	<b>Flashpoint:</b> N/A
<b>Ignition Temperature:</b> N/A	<b>Auto-ignition temperature:</b> N/A
<b>Explosion Limits:</b> <b>Lower:</b> N/A <b>Upper:</b> N/A	<b>Water solubility:</b> Insoluble
	<b>Partition coefficient (n-octanol/water):</b> N/A
	<b>Relative vapor density:</b> N/A
<b>Odor Threshold:</b> N/A	<b>Evaporation rate:</b> N/A
N/A = Not Available    N/D = Not Determined    Ca. = Approximate	

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable under recommended and normal conditions.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**INCOMPATIBILITY:** Oxidizing Agents. Strong acids, acids. Strong bases, bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Phenolics due to combustion. Carbon monoxide due to combustion. Carbon dioxide due to combustion. Nitrogen oxides due to combustion. Irritating and toxic fumes at elevated temperatures.

**CONDITIONS TO AVOID:** Open Flame / Sparks / Sources of ignition. Heat.

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicological Information:** (Acute)

**Likely routes of entry:** Skin Contact, Skin absorption, Ingestion, Inhalation

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer

LD50 Oral Rat 30,000 mg/kg

LD50 Dermal Rat >2,000 mg/kg

Not classified as a carcinogen by ACGIH, IARC or OSHA. Not listed by NTP.

Solvent Naphtha (CAS 64742-95-6)

LD50 Oral Rat >4000 mg/kg

LD50 Dermal Rabbit >3,480 mg/kg

LD50 Inhalation Rat 3,670 ppm

Not classified as a carcinogen by ACGIH, NTP, OSHA or IARC. The substance is known to cause human aspiration toxicity hazards or has to be regarded as if it causes human respiration toxicity hazard.

Hydrophobic Silica

LD50 Oral Rat >1000 mg/kg

LD50 Dermal Rat >2000 mg/kg

Not classified as a carcinogen by ACGIH, NTP, OSHA or IARC.

**Sensitization:** May cause skin sensitization. Mild eye irritant.

**Specific target organ toxicity:** no data available; no evidence of silicosis

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## 12. ECOLOGICAL INFORMATION

**Marine Pollutant/Ecotoxicity:** The toxicity of this material to aquatic organisms has not been evaluated.

**Environmental Fate:** This material is not expected to present an environmental problem. Dispose of according to Federal, Local and State regulations.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations. Incinerate in admixture with fuel equipped with a scrubber to remove nitrogen oxides and carbon monoxide. Disposal of in permitted waste management facility if incineration or landfill is not practicable.

## 14. TRANSPORT INFORMATION

### DOT SHIPPING INFORMATION

**DOT Proper Shipping Name:** Resin Compound- Not regulated

**DOT Technical Name:** N/A

**DOT Hazard Class:** N/A

**Hazard Subclass:** N/A

**DOT I.D. Number:** N/A

**Packing Group:** N/A

### IMDG

**Technical Name:** Environmentally hazardous substance, Liquid, N.O.S.

**Hazard Class:** 9

**Hazard Subclass:** N.A.

**I.D. Number:** UN3082

**Packing Group:** III

### INTERNATIONAL REGULATIONS:

**CANADIAN WHMIS:** This MSDS has been prepared in compliance with the hazard criteria of the Controlled Product Regulations and the MSDS contains the information required by those regulations.



**CANADIAN WHMIS CLASS:** D2B

## 15. REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS AS FOLLOWS-

**OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous by definition of Hazard Communication Standard.

### CERCLA/ Super Fund (40 CFR 117, 302):

#### CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard (Acute)

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## SARA Toxic Chemicals (40 CFR 372):

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: **None.**

**TOXIC SUBSTANCES CONTROL ACT:** All chemicals in this compound are listed on the TSCA.

## NEW JERSEY RIGHT-TO-KNOW/ PENNSYLVANIA RIGHT-TO-KNOW:

Chemical Name	CAS Number
Bisphenol A Epoxy Resin	25085-99-8
Carbon Black	1333-86-4
Solvent Naphtha	64742-95-6
1-Methoxy-2-Propanol Acetate	108-65-6

**California Proposition 65:** The following substance(s) is(are) known to the State of California to cause cancer, birth defects or other reproductive harm:

Carbon Black	CAS # 13333-86-4	<0.1% ***
Benzene	CAS # 71-43-2	<0.1%
Toluene	CAS # 108-88-3	<0.1%

\*\*\*May cause cancer in laboratory animals, but the available information is inadequate to determine if this material can cause cancer in humans. Risk depends on duration and level of exposure.

## 16. OTHER INFORMATION

THE INFORMATION HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, TRI-CHEM CORPORATION CANNOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY FOR ITS USE.

# SAFETY DATA SHEET



DATE PRINTED :	5/30/2017
MSDS REF. No :	H664-000

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 663 RAPID REPAIR PASTE HARDENER – TUBE VERSION 2013

**PRODUCT CODE:** H664-000

**Supplier/ Manufacturer**  
TRI-CHEM CORPORATION  
431 Stephenson Highway  
Troy, MI 48083  
800-456-6255

**TRI-CHEM CORPORATION PHONE:** 800-456-6255

**EMERGENCY PHONE:** 800-535-5053

**ORIGINAL DATE ISSUED:** 3/22/13 **REVISION DATE:** 7/23/15

**Recommended end use:** Half of a two component system designed for application and use as a quick set adhesive.

## 2. HAZARDS IDENTIFICATION

**Acute Oral Toxicity, Category 4**

**Skin Corrosion, Category 1C**

**Serious Eye Damage, Category 2A**

**Chronic Aquatic Toxicity, Category 1**



**SIGNAL WORD:** Danger

**Hazard-determining components of labeling:** Benzyl Alcohol

### Hazard Statements

H317 May cause an allergic skin reaction

H302 Harmful if swallowed

H410 Very toxic to aquatic life with long lasting effects

H335 May cause respiratory irritation

H314 Causes severe skin burns and eye damage

### Precautionary Statements

P273 Avoid Release to the Environment

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

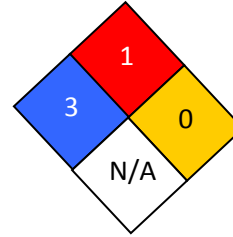
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue Rinsing.

P310 Immediately Call a POISON CENTER or doctor/physician.

# SAFETY DATA SHEET

## NFPA CODES

HMIS RATING	
Health :	3
Flammability :	1
Reactivity :	0
Personal Protection :	X



### Potential Health Effects:

**SKIN:** May cause irritation. Allergic reaction possible. May cause sensitization. Corrosive. Will cause permanent skin damage and scarring.

**EYES:** May cause irritation. Irritation, burning, tearing, and redness. Will cause eye burns.

**INHALATION:** Inhalation of vapors causes skin irritation of the respiratory tract and may cause adverse systemic effects. Dry throat and cough, dizziness, nausea, headache and fatigue. Breathing material may irritate the mucous membranes of the nose, throat, bronchi and lungs. Conditions aggravated by exposure include asthma and other respiratory disorders. Certain individuals will develop sensitization which will result in reactions at levels below the TLV.

**INGESTION:** Can result in irritation and corrosive action in the mouth, stomach tissue, and digestive tract. Symptoms can include sore throat, abdominal pain, nausea vomiting, and diarrhea.

**CHRONIC HAZARDS:** Prolonged and repeated exposure to amines may cause liver and kidney damage based on animal studies. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This document is a pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). Where a proprietary ingredient is shown, the identity may be made available as provided in this standard. All components of this product are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Chemical Name	Weight %	CAS Number
Paratertiarybutylphenol	10-30%	98-54-4
m-xylenediamine	10-30%	1477-55-0
1,3-Cyclohexanedimethaneamine	10-30%	2579-20-6
Triphenyl Phosphite	7-13%	101-02-0
Synthetic Amorphous, Pyrogenic, Fumed Silica	3-7%	112945-52-5
Titanium Dioxide	3-7%	13463-67-7
Crystalline Silica (quartz)	3-7%	14808-60-7
1-methoxy-2-propanol	7-13%	107-98-2
Fuller's earth	1-5%	8031-18-3
Solvent naphtha, petroleum, light aromatic	0.1-1%	64742-95-6

### 4. FIRST AID MEASURES

**GENERAL ADVICE:** Consult a physician. Show this safety data sheet to physician in attendance.

**EYES:** Hold eyelids open and flush with plenty of water for at least 20 minutes. Get Medical Attention.

**SKIN:** Remove product and flush with plenty of water for at least 20-30 minutes. Wash with soap and water. Remove contaminated clothing immediately, wash before next use, and discard any items too difficult to clean.

**INGESTION:** Administer 3-4 glasses of milk or water. Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING unless directed to do so by medical personnel! Call a physician or poison control center immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.



# SAFETY DATA SHEET

**INHALATION:** Consult a physician. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

## 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Dry Chemical Foam. Carbon Dioxide. Foam.

**For safety reasons, unsuitable extinguishing agents:** water spray.

**SPECIAL FIRE & UNUSUAL HAZARD:** May generate toxic fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

**SPECIAL FIREFIGHTING INSTRUCTIONS:** Firefighters should be equipped with NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

**ADDITIONAL INFORMATION:** Remove all ignition sources. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**HAZARDOUS COMBUSTION PRODUCTS formed under fire conditions:** carbon oxides, nitrogen oxides, ammonia gas

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Evacuate personnel to safe area. Ensure adequate ventilation. Wear a self-contained breathing apparatus and appropriate personal protective equipment.

**Environmental precautions:**

Approach suspected leak areas with caution. Prevent further leaking if safe to do so. Construct a dike to prevent spreading. Flush area with water spray. Absorb spill with inert material (ex. dry sand or earth) and place in a chemical waste container for disposal. Avoid runoff into storm sewers and ditches which lead into waterways. Discharge into the environment must be avoided. If seepage into the environment has occurred, notify respective authorities. Open enclosed spaces to outside atmosphere if possible and stop flow of product.

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7. HANDLING AND STORAGE

**HANDLING:** Handle in a well-ventilated workspace. Empty containers may contain explosive vapors. Flush empty containers with water to remove residual flammable liquid vapors. Ground all containers during material transfer. Avoid breathing dust, vapor or mist. Avoid contact with eyes. Avoid contact with skin or clothing.

**STORAGE:** Keep from freezing. Keep container closed when not in use. Keep container in a cool, well-ventilated place. Keep away from food, drink, and animal feed stuffs. Keep away from ignition sources and other incompatibilities. Store in original container or a container very similar to that of the original.

## 8. EXPOSURE CONTROLS\PERSONAL PROTECTION

**Ventilation:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

**1-methoxy-2-propanol:** ACGIH TWA—100 ppm OSHA PEL TWA—150ppm

**Personal Protection Equipment:**

**Respiratory Protection:** In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended. For emergency situations use self-contained breathing apparatus with pressure demand mode.



**Skin Protection:** Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles. Gloves should be tested for chemical resistance before reliable use. (penetration times, rates of diffusion and rate of degradation). Wear long sleeves and pants, exposing as little skin as possible.



**Eye Protection:** Wear chemical safety glasses with side shields or goggles. In the event of an emergency, use eye goggles with a full face shield. DO NOT WEAR CONTACT LENSES when working with this material!!!

**Hygienic Practices:** Wash hands before eating. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Volatile Organic Content:</b> 28.14 g/L	<b>Solubility in Water:</b> Slightly Miscible
<b>Color:</b> White	<b>Specific Gravity @ 20°C:</b> 1.2518542
<b>Odor:</b> Ammoniacal	<b>pH @ 100%:</b> N.A.
<b>Physical Appearance:</b> White, milky liquid	<b>Melting/Freezing point:</b> N/A
<b>Boiling Point:</b> N/A	<b>Flashpoint:</b> N/A
<b>Ignition Temperature:</b> N/A	<b>Auto-ignition temperature:</b> N/A
<b>Explosion Limits:</b> <b>Lower:</b> N/A <b>Upper:</b> N/A	<b>Water solubility:</b> Slightly Miscible
	<b>Partition coefficient (n-octanol/water):</b> N/A
	<b>Relative vapor density:</b> N/A
<b>Odor Threshold:</b> N/A	<b>Evaporation rate:</b> N/A
N/A = Not Available    N/D = Not Determined    Ca. = Approximate	

## 10. STABILITY AND REACTIVITY

**STABILITY:** This product is stable under recommended and normal storage conditions.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**INCOMPATIBILITY:** Oxidizing Agents. Strong acids, acids. Epoxies. Reducers. Moisture.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide due to combustion. Carbon dioxide due to combustion.

Nitrogen oxides due to combustion. Irritating and toxic fumes at elevated temperatures. Organic compounds.

**CONDITIONS TO AVOID:** Open Flame / Sparks / Sources of ignition. Heat. Torches.

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicological Information:** (Acute)

**Likely routes of entry:** Skin Contact, Skin absorption, Ingestion, Inhalation

### Triphenyl phosphite

Skin Effects: Human: Driaze 48H; 125mg, severe irritant

Rabbit: Mouse: Acute Dermal; LD50 5000 mg/kg

Direct contact with liquid or mist may cause dermal drying and irritation, possibly severe. Triphenyl phosphite diluted 1:3 with cold cream produced mild irritation in 2/3 of persons tested after 48hours

Ingestion Effects: Rat: Acute Oral; LD50; 1.6g/kg

Acute exposure in animal studies produced tremors, diarrhea and vasodilation. If sufficient amounts are absorbed, toxic neuropathy may develop.

Inhalation Effects: Rat: LC50 >6700mg/m<sup>3</sup>/1H

Change in White Blood Cells and Red Blood cells, weight loss or decreased weight gain

Subchronic Effects: Animal Studies indicate weak cholinesterase depressant and ataxia. Target Organs: immune system, nervous system. May aggravate nervous system disorders.

Carcinogenicity: Not listed by NTP, OSHA or IARC

Tertatology: No data

Reproductive effects: No data

Mutagenicity: AMES test: not a mutagen

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Synthetic Amorphous, Pyrogenic, Fumed Silica

LD50 Oral Rabbit >10,000 mg/kg

LD50 Dermal Rabbit >5,000 mg/kg

This product is or contains a component that is not classifiable as to its carcinogenicity based on its ACGIH, NTP, EPA or IARC classification. Carcinogenic by RTECS criteria.

Sensitization: May cause sensitization of susceptible persons by skin contact.

Skin irritation/corrosion: Corrosive in an invitro test.

Solvent Naphtha (CAS 64742-95-6)

LD50 Oral Rat >4000 mg/kg

LD50 Dermal Rabbit >3,480 mg/kg

LD50 Inhalation Rat 3,670 ppm

Not classified as a carcinogen by ACGIH, NTP, OSHA or IARC. The substance is known to cause human aspiration toxicity hazards or has to be regarded as if it causes human respiration toxicity hazard.

**CHRONIC HEALTH HAZARD:** Respirable particles of crystalline silica are known to contribute to cancer.

## 12. ECOLOGICAL INFORMATION

**Marine Pollutant/Ecotoxicity:** This material is classified as dangerous for the environment. It is considered very toxic to and may cause long-term effects in the aquatic environment. Measures should be taken to prevent this material from entering waterways.

Goldfish: 96 hour: LC50;

### Environmental Fate:

Toxicity to Fish:

Triphenyl phosphite: LC50 (96h): 700µg/l Goldfish

Synthetic Amorphous, Pyrogenic, Fumed Silica: LC50 (96h): >10,000 mg/l Brachydanio rerio  
EC50 (24h): >10,000 mg/l Daphnia magna

**Environmental Fate:** Low bioaccumulation potential. Do not allow material to enter sewers, contact soil or enter any body of water. Avoid discharge to the environment. Product is not known to deplete the ozone layer.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** The generation of waste should be avoided or minimized wherever possible. Do not dispose of with household waste. Do not dispose of in landfill. Do not allow contact with sewers or waterways. Comply with all Federal, State and Local regulations.

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## 14. TRANSPORT INFORMATION

### DOT SHIPPING INFORMATION

**DOT Proper Shipping Name:** Amines, Liquid, Corrosive, N.O.S.

**DOT Technical Name:** Amines, Liquid, Corrosive, N.O.S. (1, 3-Cyclohexanedimethanamine, xylene diamine)

**DOT Hazard Class:** Class 8

**Hazard Subclass:** N/A

**DOT I.D. Number:** UN2735

**Packing Group:** II

### IMDG

**Technical Name:** Amines, Liquid, Corrosive, N.O.S. (1,3-Cyclohexanedimethanamine, xylene diamine)

**Hazard Class:** Class 8

**Hazard Subclass:** N.A.

**I.D. Number:** UN2735

**Packing Group:** III

### INTERNATIONAL REGULATIONS:

**CANADIAN WHMIS:** This MSDS has been prepared in compliance with the hazard criteria of the Controlled Product Regulations and the MSDS contains the information required by those regulations.



**CANADIAN WHMIS CLASS:** E

D2B

## 15. REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS AS FOLLOWS-

**OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous by definition of Hazard Communication Standard.

**Sensitizer. Corrosive.**

### CERCLA/ Super Fund (40 CFR 117, 302):

#### CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard (Acute) Delayed Health Hazard (Chronic)

### SARA Toxic Chemicals (40 CFR 372):

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: **None.**

**TOXIC SUBSTANCES CONTROL ACT:** All components are listed on the TSCA inventory.

# MATERIAL SAFETY DATA SHEET

## NEW JERSEY RIGHT-TO-KNOW:

Chemical Name	CAS Number
M-xylenediamine	1477-55-0
Titanium Dioxide	13463-67-7
Magnesium Oxide	1309-48-4
Crystalline Silica	14808-60-7
Solvent Naphtha	64742-95-6
1-Methoxy-2-Propanol Acetate	108-65-6

## PENNSYLVANIA RIGHT-TO-KNOW:

Chemical Name	CAS Number
M-xylenediamine	1477-55-0
Titanium Dioxide	13463-67-7
Paratertiarybutylphenol	98-54-4
1,3-cyclohexanedimethaneamine	2579-20-6
Triphenyl Phosphite	101-02-0
Amorphous Fumed Silica	112945-52-5
Magnesium Oxide	1309-48-4
Crystalline Silica	14808-60-7
Solvent Naphtha	64742-95-6
1-Methoxy-2-Propanol Acetate	108-65-6

**California Proposition 65:** The following substance(s) is(are) known to the State of California to cause cancer, birth defects or other reproductive harm:

Benzene	CAS # 71-43-2	<0.1%
Toluene	CAS # 108-88-3	<0.1%

## 16. OTHER INFORMATION

THE INFORMATION HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, TRI-CHEM CORPORATION CANNOT GIVE ANY GUARANTEES REGARDING INFORMATION FROM OTHER SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILITY FOR ITS USE.