

Common Name: PC-CLEAR, PART A, PC-CLEAR, PART B

Manufacturer: PROTECTIVE COATINGS

SDS Revision Date: 7/4/2013

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Item Number(s): 25F529, 25F530, 25F531, 4AUX6

Manufacturer Model  
Number(s):

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PC

SAFETY DATA SHEET

ISSUE DATE: 05-JUL-2012

REVISION DATE: 04-JUL-2013

VERSION: 1

## **1. IDENTIFICATION**

PRODUCT IDENTIFIER:

PRODUCT NAME: PC-CLEAR, PART A

OTHER MEANS OF IDENTIFICATION:

SDS #: 130625-33

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

RECOMMENDED USE: ADHESIVES.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

SUPPLIER ADDRESS:

PROTECTIVE COATINGS CO.

221 S THIRD ST.

ALLENTOWN, PA 18102

USA

EMERGENCY TELEPHONE NUMBER:

COMPANY PHONE NUMBER:

610-432-3543

800-220-2103

EMERGENCY TELEPHONE (24 HR):

INFOTRAC:

1-352-323-3500 (INTERNATIONAL)

1-800-535-5053 (NORTH AMERICA)

## **2. HAZARDS IDENTIFICATION**

CLASSIFICATION:

SKIN CORROSION/IRRITATION: CATEGORY 2

SERIOUS EYE DAMAGE/EYE IRRITATION: CATEGORY 2

SKIN SENSITIZATION: CATEGORY 1

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

CAUSES SKIN IRRITATION  
CAUSES SERIOUS EYE IRRITATION  
MAY CAUSE AN ALLERGIC SKIN REACTION

EXCLAMATION MARK

APPEARANCE: CLEAR LIQUID

PHYSICAL STATE: LIQUID

ODOR: MILD

PRECAUTIONARY STATEMENTS - PREVENTION:

WASH FACE, HANDS AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING  
WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION  
AVOID BREATHING DUST/FUME/GAS/MIST/VAPORS/SPRAY  
CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE

PRECAUTIONARY STATEMENTS - RESPONSE:

IF IN EYES:

RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES,  
IF PRESENT AND EASY TO DO. CONTINUE RINSING

GET MEDICAL ATTENTION IF IRRITATION OCCURS

IF ON SKIN:

WASH WITH PLENTY OF SOAP AND WATER  
TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE

IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION

PRECAUTIONARY STATEMENTS - DISPOSAL:

DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO	WEIGHT-%
BISPHENOL A - EPICHLOROHYDRIN POLYMER	25068-38-6	65-90
BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN	PROPRIETARY	5-15

PRODUCT CONTAINS A PROPRIETARY MIXTURE OF INGREDIENTS.

### 4. FIRST-AID MEASURES

FIRST AID MEASURES:

GENERAL ADVICE:

PROVIDE THIS SDS TO MEDICAL PERSONNEL FOR TREATMENT. AFTER FIRST AID, GET APPROPRIATE IN-PLANT, PARAMEDIC, OR COMMUNITY MEDICAL SUPPORT.

EYE CONTACT:

FLUSH EYES THOROUGHLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES AFTER THE INITIAL 1-2 MINUTES AND CONTINUE FLUSHING FOR SEVERAL ADDITIONAL MINUTES. IF EFFECTS OCCUR, CONSULT A PHYSICIAN, PREFERABLY AN OPHTHALMOLOGIST.

SKIN CONTACT:

WASH WITH SOAP AND WATER. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. DISCARD ITEMS WHICH CANNOT BE DECONTAMINATED, INCLUDING LEATHER ARTICLES SUCH AS SHOES, BELTS AND WATCHBANDS. GET MEDICAL ATTENTION IF IRRITATION OCCURS.

INHALATION:

REMOVE EXPOSED INDIVIDUAL(S) TO FRESH AIR FOR 20 MINUTES. CONSULT A PHYSICIAN / POISON CENTER IF INDIVIDUAL'S CONDITION DECLINES OR IF SYMPTOMS PERSIST.

INGESTION:

CLEAN MOUTH WITH WATER AND DRINK AFTERWARDS PLENTY OF WATER. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL ADVICE.

SELF-PROTECTION OF THE FIRST AIDER:

FIRST AID RESPONDERS SHOULD PAY ATTENTION TO SELF-PROTECTION AND USE THE RECOMMENDED PROTECTIVE CLOTHING (CHEMICAL RESISTANT GLOVES, SPLASH PROTECTION). IF POTENTIAL FOR EXPOSURE EXISTS REFER TO SECTION 8 FOR SPECIFIC PERSONAL PROTECTIVE EQUIPMENT.

MOST IMPORTANT SYMPTOMS AND EFFECTS:

SYMPTOMS:

CAUSES EYE IRRITATION. DIRECT CONTACT MAY CAUSE TEMPORARY REDNESS AND DISCOMFORT. CAUSES SKIN IRRITATION. INHALATION ONLY POSSIBLE AT ELEVATED TEMPERATURES. MAY CAUSE IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

NOTES TO PHYSICIAN:

SKIN AND EYE CONDITIONS MAY BE AGGRAVATED BY LONG TERM EXPOSURE. NO SPECIFIC ANTIDOTE. TREATMENT OF EXPOSURE SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION OF THE PATIENT.

## **5. FIRE-FIGHTING MEASURES**

SUITABLE EXTINGUISHING MEDIA:

CARBON DIOXIDE (CO<sub>2</sub>), DRY CHEMICAL, ALCOHOL FOAM.

UNSUITABLE EXTINGUISHING MEDIA: NOT DETERMINED.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:  
IGNITION WILL GIVE RISE TO A CLASS B FIRE.

HAZARDOUS COMBUSTION PRODUCTS: CARBON MONOXIDE.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:  
A FACE SHIELD SHOULD BE WORN. FIREFIGHTERS SHOULD WEAR BUTYL RUBBER BOOTS,  
GLOVES, AND BODY SUIT AND A SELF-CONTAINED BREATHING APPARATUS. WATER SPRAY  
MAY BE USED TO COOL CLOSED CONTAINERS EXPOSED TO FIRE. RETAIN EXPENDED  
LIQUIDS FROM FIRE FIGHTING FOR LATER DISPOSAL. DO NOT RELEASE RUNOFF FROM  
FIRE CONTROL METHODS TO SEWERS OR WATERWAYS. NFPA CLASS IIIB.

## **6. ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

PERSONAL PRECAUTIONS:  
WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING AND EYE/FACE PROTECTION. AVOID  
BREATHING VAPORS, MIST OR GAS. REMOVE ANY CONTAMINATED CLOTHING AND WASH  
THOROUGHLY BEFORE REUSE.

FOR EMERGENCY RESPONDERS:  
FOLLOW APPLICABLE OSHA REGULATIONS (29 CFR 1910.120).

ENVIRONMENTAL PRECAUTIONS:  
SEE SECTION 12 FOR ADDITIONAL ECOLOGICAL INFORMATION. DO NOT RELEASE INTO  
SEWERS OR WATERWAYS.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

METHODS FOR CONTAINMENT:  
PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. FOR LARGE SPILLS,  
DIKE FAR AHEAD OF LIQUID SPILL FOR LATER DISPOSAL.

METHODS FOR CLEAN-UP:  
SOAK UP IN ADSORBENT MATERIAL SUCH AS SAND AND COLLECT IN SUITABLE  
CONTAINERS. RESIDUAL RESIN MAY BE REMOVED USING STEAM OR HOT SOAPY WATER.

## **7. HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING:

ADVICE ON SAFE HANDLING:  
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.  
WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING  
DUST/FUME/GAS/MIST/VAPORS/SPRAY. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS  
PRODUCT. WASH FACE, HANDS, AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING.  
CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE CONDITIONS:

KEEP CONTAINERS TIGHTLY CLOSED IN A DRY, COOL AND WELL-VENTILATED PLACE.  
STORE CONTENTS UNDER <90F (32C). NFPA CLASS IIIB STORAGE.

INCOMPATIBLE MATERIALS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES: THE FOLLOWING INFORMATION IS GIVEN AS GENERAL GUIDANCE

APPROPRIATE ENGINEERING CONTROLS:

ENGINEERING CONTROLS:

PROVIDE GENERAL OR LOCAL EXHAUST VENTILATION IF PRODUCT IS SANDED OR  
GROUND. SUITABLE EMERGENCY EYE WASH FACILITY SHOULD BE AVAILABLE IN WORK  
AREA.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: CHEMICAL SAFETY GOGGLES/FACESHIELD.

SKIN AND BODY PROTECTION: WEAR PROTECTIVE GLOVES AND PROTECTIVE CLOTHING.

RESPIRATORY PROTECTION:

FOLLOW OSHA RESPIRATOR REGULATIONS (29 CFR 1910.134) AND, IF NECESSARY,  
WEAR A MSHA/NIOSH-APPROVED RESPIRATOR.

GENERAL HYGIENE CONSIDERATIONS:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE.  
DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. WASH CONTAMINATED  
CLOTHING BEFORE REUSE.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: LIQUID

APPEARANCE: CLEAR LIQUID

ODOR: MILD

COLOR: CLEAR

ODOR THRESHOLD: NOT DETERMINED

PROPERTY

VALUES

REMARKS - METHOD

PH	NOT DETERMINED	
MELTING POINT/FREEZING POINT	NOT AVAILABLE	
BOILING POINT/BOILING RANGE	NO DATA	
FLASH POINT	248.88 DEG. C / 480 DEG. F	CC (CLOSED CUP)
EVAPORATION RATE	NOT DETERMINED	
FLAMMABILITY (SOLID, GAS)	NOT DETERMINED	
UPPER FLAMMABILITY LIMITS	NOT AVAILABLE	
LOWER FLAMMABILITY LIMIT	NOT AVAILABLE	
VAPOR PRESSURE	NOT DETERMINED	
VAPOR DENSITY	NOT AVAILABLE	
SPECIFIC GRAVITY	1.17	(1=WATER) @ 4 DEG. C
WATER SOLUBILITY	INSOLUBLE IN WATER	
SOLUBILITY IN OTHER SOLVENTS	ALCOHOLS	
PARTITION COEFFICIENT	NOT DETERMINED	
AUTOIGNITION TEMPERATURE	NOT DETERMINED	
DECOMPOSITION TEMPERATURE	NOT DETERMINED	
KINEMATIC VISCOSITY	NOT DETERMINED	
DYNAMIC VISCOSITY	NOT DETERMINED	
EXPLOSIVE PROPERTIES	NOT DETERMINED	
OXIDIZING PROPERTIES	NOT DETERMINED	
DENSITY	9.7 LBS/GAL	

## 10. STABILITY AND REACTIVITY

REACTIVITY: NOT REACTIVE UNDER NORMAL CONDITIONS.

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS: NONE UNDER NORMAL PROCESSING.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

CONDITIONS TO AVOID: KEEP OUT OF REACH OF CHILDREN.

INCOMPATIBLE MATERIALS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

## 11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:

PRODUCT INFORMATION:

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION.

SKIN CONTACT: CAUSES SKIN IRRITATION.

INHALATION: MAY CAUSE IRRITATION OF RESPIRATORY TRACT.

INGESTION: MAY CAUSE DISCOMFORT IF SWALLOWED.

COMPONENT INFORMATION:

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
BISPHENOL A - EPICHLOROHYDRIN POLYMER 25068-38-6	=11400 MG/KG (RAT)	20000 MG/KG (RABBIT)	

INFORMATION ON PHYSICAL, CHEMICAL AND TOXICOLOGICAL EFFECTS:

SYMPTOMS: PLEASE SEE SECTION 4 OF THIS SDS FOR SYMPTOMS.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

SENSITIZATION: MAY CAUSE AN ALLERGIC SKIN REACTION.

CARCINOGENICITY:

THIS PRODUCT DOES NOT CONTAIN ANY CARCINOGENS OR POTENTIAL CARCINOGENS AS LISTED BY OSHA, IARC OR NTP.

NUMERICAL MEASURES OF TOXICITY: NOT DETERMINED

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY:

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL.

PERSISTENCE/DEGRADABILITY: NOT DETERMINED

BIOACCUMULATION: NOT DETERMINED



MOBILITY: NOT DETERMINED

OTHER ADVERSE EFFECTS: NOT DETERMINED

### **13. DISPOSAL CONSIDERATIONS**

WASTE TREATMENT METHODS:

DISPOSAL OF WASTES:

CONTACT YOUR SUPPLIER OR A LICENSED CONTRACTOR FOR DETAILED RECOMMENDATIONS. DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

CONTAMINATED PACKAGING:

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

### **14. TRANSPORT INFORMATION**

NOTE:

PLEASE SEE CURRENT SHIPPING PAPER FOR MOST UP TO DATE SHIPPING INFORMATION, INCLUDING EXEMPTIONS AND SPECIAL CIRCUMSTANCES.

DOT: NOT REGULATED

IATA: NOT REGULATED

IMDG: NOT REGULATED

### **15. REGULATORY INFORMATION**

INTERNATIONAL INVENTORIES: NOT DETERMINED

LEGEND:

TSCA: UNITED STATES TOXIC SUBSTANCES CONTROL ACT SECTION 8(B) INVENTORY

DSL/NDSL: CANADIAN DOMESTIC SUBSTANCES LIST/NON-DOMESTIC SUBSTANCES LIST

EINECS/ELINCS:

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES/EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES

ENCS: JAPAN EXISTING AND NEW CHEMICAL SUBSTANCES

IECSC: CHINA INVENTORY OF EXISTING CHEMICAL SUBSTANCES

KECL: KOREAN EXISTING AND EVALUATED CHEMICAL SUBSTANCES

PICCS: PHILIPPINES INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES

US FEDERAL REGULATIONS:

SARA 313: NOT DETERMINED

US STATE REGULATIONS:

U.S. STATE RIGHT-TO-KNOW REGULATIONS: NOT DETERMINED

## 16. OTHER INFORMATION

NFPA:

HEALTH HAZARDS 1  
FLAMMABILITY 1  
INSTABILITY 0  
SPECIAL HAZARDS NOT DETERMINED

HMIS:

HEALTH HAZARDS 1  
FLAMMABILITY 1  
PHYSICAL HAZARDS 0  
PERSONAL PROTECTION B - SAFETY GLASSES, GLOVES

ISSUE DATE: 05-JUL-2012

REVISION DATE: 04-JUL-2013

REVISION NOTE: NEW FORMAT

DISCLAIMER:

THE INFORMATION PROVIDED IN THIS SAFETY DATA SHEET IS CORRECT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF AT THE DATE OF ITS PUBLICATION. THE INFORMATION GIVEN IS DESIGNED ONLY AS A GUIDANCE FOR SAFE HANDLING, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND RELEASE AND IS NOT TO BE CONSIDERED A WARRANTY OR QUALITY SPECIFICATION. THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS, UNLESS SPECIFIED IN THE TEXT.

PC

SAFETY DATA SHEET

ISSUE DATE: 18-DEC-2012

REVISION DATE: 04-JUL-2013

VERSION: 1

## **1. IDENTIFICATION**

PRODUCT IDENTIFIER:

PRODUCT NAME: PC-CLEAR, PART B

OTHER MEANS OF IDENTIFICATION:

SDS #: 130625-32

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

RECOMMENDED USE: ADHESIVES.

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:

SUPPLIER ADDRESS:  
PROTECTIVE COATINGS CO.  
221 S THIRD ST.  
ALLENTOWN, PA 18102  
USA

EMERGENCY TELEPHONE NUMBER:

COMPANY PHONE NUMBER:  
610-432-3543  
800-220-2103

EMERGENCY TELEPHONE (24 HR):  
INFOTRAC:  
1-352-323-3500 (INTERNATIONAL)  
1-800-535-5053 (NORTH AMERICA)

## **2. HAZARDS IDENTIFICATION**

CLASSIFICATION:  
SKIN CORROSION/IRRITATION: CATEGORY 2  
SERIOUS EYE DAMAGE/EYE IRRITATION: CATEGORY 2  
SKIN SENSITIZATION: CATEGORY 1

SIGNAL WORD: WARNING

HAZARD STATEMENTS:  
CAUSES SKIN IRRITATION  
CAUSES SERIOUS EYE IRRITATION  
MAY CAUSE AN ALLERGIC SKIN REACTION

EXCLAMATION MARK

APPEARANCE: YELLOW LIQUID

PHYSICAL STATE: LIQUID

ODOR: MERCAPTAN

PRECAUTIONARY STATEMENTS - PREVENTION:

WASH FACE, HANDS AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING  
WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION  
AVOID BREATHING DUST/FUME/GAS/MIST/VAPORS/SPRAY  
CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE

PRECAUTIONARY STATEMENTS - RESPONSE:

IF IN EYES:

RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES,  
IF PRESENT AND EASY TO DO. CONTINUE RINSING

GET MEDICAL ATTENTION IF IRRITATION OCCURS

IF ON SKIN:

WASH WITH PLENTY OF SOAP AND WATER  
TAKE OFF CONTAMINATED CLOTHING AND WASH IT BEFORE REUSE

IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION

PRECAUTIONARY STATEMENTS - DISPOSAL:

DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO	WEIGHT-%
MERCAPTAN POLYMER	TRADE SECRET	75-95
MODIFIED POLYAMINE	26950-63-0	5-15
TRIETHYLENE TETRAMINE	112-24-3	1-5

PRODUCT CONTAINS A PROPRIETARY MIXTURE OF INGREDIENTS.

### 4. FIRST-AID MEASURES

FIRST AID MEASURES:

GENERAL ADVICE:

PROVIDE THIS SDS TO MEDICAL PERSONNEL FOR TREATMENT. AFTER FIRST AID,  
GET APPROPRIATE IN-PLANT, PARAMEDIC, OR COMMUNITY MEDICAL SUPPORT.

EYE CONTACT:

IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHING, REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION OCCURS.

SKIN CONTACT:

WASH WITH SOAP AND WATER. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. GET MEDICAL ATTENTION IF IRRITATION OCCURS.

INHALATION:

REMOVE EXPOSED INDIVIDUAL(S) TO FRESH AIR FOR 20 MINUTES. CONSULT A PHYSICIAN / POISON CENTER IF INDIVIDUAL'S CONDITION DECLINES OR IF SYMPTOMS PERSIST.

INGESTION:

DO NOT INDUCE VOMITING. CLEAN MOUTH WITH WATER AND DRINK AFTERWARDS PLENTY OF WATER. PREVENT ASPIRATION OF VOMIT. TURN VICTIM'S HEAD TO THE SIDE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. SEEK MEDICAL ADVICE.

MOST IMPORTANT SYMPTOMS AND EFFECTS:

SYMPTOMS:

CAUSES EYE IRRITATION. DIRECT CONTACT MAY CAUSE TEMPORARY REDNESS AND DISCOMFORT. CAUSES SKIN IRRITATION. CAN CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE NOSE, THROAT, AND LUNG IRRITATION.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

NOTES TO PHYSICIAN:

SKIN AND EYE CONDITIONS MAY BE AGGRAVATED BY LONG TERM EXPOSURE. APPLICATION OF CORTICOSTEROID CREAM HAS BEEN EFFECTIVE IN TREATING SKIN IRRITATION.

## **5. FIRE-FIGHTING MEASURES**

SUITABLE EXTINGUISHING MEDIA: DRY CHEMICAL, CO2 OR WATER SPRAY.

UNSUITABLE EXTINGUISHING MEDIA: NOT DETERMINED.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: PRODUCT IS NOT FLAMMABLE.

HAZARDOUS COMBUSTION PRODUCTS:

CARBON MONOXIDE. CARBON DIOXIDE (CO2). ALDEHYDES.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:

AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR. WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA). DO NOT RELEASE RUNOFF FROM FIRE CONTROL METHODS TO SEWERS OR WATERWAYS. NFPA CLASS IIIB.

## **6. ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

PERSONAL PRECAUTIONS:

WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING AND EYE/FACE PROTECTION. AVOID BREATHING VAPORS, MIST OR GAS. REMOVE ANY CONTAMINATED CLOTHING AND WASH THOROUGHLY BEFORE REUSE.

FOR EMERGENCY RESPONDERS:

FOLLOW APPLICABLE OSHA REGULATIONS (29 CFR 1910.120).

ENVIRONMENTAL PRECAUTIONS:

SEE SECTION 12 FOR ADDITIONAL ECOLOGICAL INFORMATION. PREVENT RUNOFF FROM ENTERING DRAINS, SEWERS OR STREAMS.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

METHODS FOR CONTAINMENT:

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. SOAK UP AND CONTAIN SPILL WITH AN ABSORBENT MATERIAL.

METHODS FOR CLEAN-UP:

DISPOSE OF CONTENTS/CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT. SWEEP UP ABSORBED MATERIAL AND SHOVEL INTO SUITABLE CONTAINERS FOR DISPOSAL. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER OR LINER IN FULL COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. FOR WASTE DISPOSAL, SEE SECTION 13 OF THE SDS.

## **7. HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING:

ADVICE ON SAFE HANDLING:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING DUST/FUME/GAS/MIST/VAPORS/SPRAY. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. WASH FACE, HANDS, AND ANY EXPOSED SKIN THOROUGHLY AFTER HANDLING. CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE CONDITIONS:

KEEP CONTAINERS TIGHTLY CLOSED IN A DRY, COOL AND WELL-VENTILATED PLACE. STORE CONTENTS UNDER <90F (32C). NFPA CLASS IIIB STORAGE.

INCOMPATIBLE MATERIALS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

EXPOSURE GUIDELINES: THE FOLLOWING INFORMATION IS GIVEN AS GENERAL GUIDANCE

APPROPRIATE ENGINEERING CONTROLS:

ENGINEERING CONTROLS:

PROVIDE GENERAL OR LOCAL EXHAUST VENTILATION IF PRODUCT IS SANDED OR GROUND.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: CHEMICAL SAFETY GOGGLES/FACESHIELD.

SKIN AND BODY PROTECTION: WEAR PROTECTIVE GLOVES AND PROTECTIVE CLOTHING.

RESPIRATORY PROTECTION:

ENSURE ADEQUATE VENTILATION, ESPECIALLY IN CONFINED AREAS. FOLLOW OSHA RESPIRATOR REGULATIONS (29 CFR 1910.134) AND, IF NECESSARY, WEAR A MSHA/NIOSH-APPROVED RESPIRATOR.

GENERAL HYGIENE CONSIDERATIONS:

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. WASH CONTAMINATED CLOTHING BEFORE REUSE.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: LIQUID

APPEARANCE: YELLOW LIQUID

ODOR: MERCAPTAN

COLOR: YELLOW

ODOR THRESHOLD: NOT DETERMINED

PROPERTY	VALUES	REMARKS - METHOD
PH	NOT DETERMINED	
MELTING POINT/FREEZING POINT	NOT AVAILABLE	
BOILING POINT/BOILING RANGE	NO DATA	
FLASH POINT	248.88 DEG. C / 480 DEG. F	CC (CLOSED CUP)
EVAPORATION RATE	NOT DETERMINED	

FLAMMABILITY (SOLID, GAS)	NOT DETERMINED	
UPPER FLAMMABILITY LIMITS	NOT AVAILABLE	
LOWER FLAMMABILITY LIMIT	NOT AVAILABLE	
VAPOR PRESSURE	NOT DETERMINED	
VAPOR DENSITY	NOT AVAILABLE	
SPECIFIC GRAVITY	1.17	(1=WATER) @ 4 DEG. C
WATER SOLUBILITY	INSOLUBLE IN WATER	
SOLUBILITY IN OTHER SOLVENTS	ALCOHOLS	
PARTITION COEFFICIENT	NOT DETERMINED	
AUTOIGNITION TEMPERATURE	NOT DETERMINED	
DECOMPOSITION TEMPERATURE	NOT DETERMINED	
KINEMATIC VISCOSITY	NOT DETERMINED	
DYNAMIC VISCOSITY	NOT DETERMINED	
EXPLOSIVE PROPERTIES	NOT DETERMINED	
OXIDIZING PROPERTIES	NOT DETERMINED	
DENSITY	9.7 LBS/GAL	

## 10. STABILITY AND REACTIVITY

REACTIVITY: NOT REACTIVE UNDER NORMAL CONDITIONS.

CHEMICAL STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS: NONE UNDER NORMAL PROCESSING.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

CONDITIONS TO AVOID: KEEP OUT OF REACH OF CHILDREN.

INCOMPATIBLE MATERIALS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE KNOWN BASED ON INFORMATION SUPPLIED.

## 11. TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE:



PRODUCT INFORMATION:

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION.

SKIN CONTACT: CAUSES SKIN IRRITATION.

INHALATION:

UNDER NORMAL CONDITIONS OF INTENDED USE, THIS MATERIAL IS NOT EXPECTED TO BE AN INHALATION HAZARD.

INGESTION: MAY CAUSE DISCOMFORT IF SWALLOWED.

COMPONENT INFORMATION:

CHEMICAL NAME	ORAL LD50	DERMAL LD50	INHALATION LC50
TRIETHYLENE TETRAMINE 112-24-3	=2500 MG/KG (RAT)	=550 MG/KG (RABBIT)	

INFORMATION ON PHYSICAL, CHEMICAL AND TOXICOLOGICAL EFFECTS:

SYMPTOMS: PLEASE SEE SECTION 4 OF THIS SDS FOR SYMPTOMS.

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

SENSITIZATION: MAY CAUSE AN ALLERGIC SKIN REACTION.

CARCINOGENICITY:

THIS PRODUCT DOES NOT CONTAIN ANY CARCINOGENS OR POTENTIAL CARCINOGENS AS LISTED BY OSHA, IARC OR NTP.

NUMERICAL MEASURES OF TOXICITY: NOT DETERMINED

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY:

AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL.

CHEMICAL NAME	ALGAE/AQUATIC PLANTS	FISH
TRIETHYLENE TETRAMINE 112-24-3	2.5: 72 H DESMODESMUS SUBSPICATUS MG/L	570: 96 H POECILIA RETICULATA MG/L
	EC50 20: 72 H PSEUDOKIRCHNERIELLA SUBCAPITATA MG/L	LC50 SEMI-STATIC 495: 96 H PIMEPHALES PROMELAS MG/L LC50
	EC50 3.7: 96 H PSEUDOKIRCHNERIELLA	

SUBCAPITATA MG/L EC50

CHEMICAL NAME	TOXICITY TO MICROORGANISMS	CRUSTACEA
TRIETHYLENE TETRAMINE 112-24-3		31.1: 48 H DAPHNIA MAGNA MG/L EC50

PERSISTENCE/DEGRADABILITY: NOT DETERMINED

BIOACCUMULATION: NOT DETERMINED

MOBILITY:

CHEMICAL NAME	PARTITION COEFFICIENT
TRIETHYLENE TETRAMINE 112-24-3	-1.4

OTHER ADVERSE EFFECTS: NOT DETERMINED

### **13. DISPOSAL CONSIDERATIONS**

WASTE TREATMENT METHODS:

DISPOSAL OF WASTES:

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

CONTAMINATED PACKAGING:

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

### **14. TRANSPORT INFORMATION**

NOTE:

PLEASE SEE CURRENT SHIPPING PAPER FOR MOST UP TO DATE SHIPPING INFORMATION, INCLUDING EXEMPTIONS AND SPECIAL CIRCUMSTANCES.

DOT: NOT REGULATED

IATA: NOT REGULATED

IMDG: NOT REGULATED

### **15. REGULATORY INFORMATION**

INTERNATIONAL INVENTORIES: NOT DETERMINED

LEGEND:

TSCA: UNITED STATES TOXIC SUBSTANCES CONTROL ACT SECTION 8(B) INVENTORY

DSL/NDL: CANADIAN DOMESTIC SUBSTANCES LIST/NON-DOMESTIC SUBSTANCES LIST

EINECS/ELINCS:

EUROPEAN INVENTORY OF EXISTING CHEMICAL SUBSTANCES/EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES

ENCS: JAPAN EXISTING AND NEW CHEMICAL SUBSTANCES

IECSC: CHINA INVENTORY OF EXISTING CHEMICAL SUBSTANCES

KECL: KOREAN EXISTING AND EVALUATED CHEMICAL SUBSTANCES

PICCS: PHILIPPINES INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES

US FEDERAL REGULATIONS:

SARA 313: NOT DETERMINED

US STATE REGULATIONS:

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

CHEMICAL NAME	NEW JERSEY	MASSACHUSETTS	PENNSYLVANIA
TRIETHYLENE TETRAMINE 112-24-3	X	X	X

## 16. OTHER INFORMATION

NFPA:

HEALTH HAZARDS 1  
FLAMMABILITY 1  
INSTABILITY 0  
SPECIAL HAZARDS NOT DETERMINED

HMS:

HEALTH HAZARDS 2  
FLAMMABILITY 1  
PHYSICAL HAZARDS 0  
PERSONAL PROTECTION B - SAFETY GLASSES, GLOVES

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DISCLAIMER:

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