

SAFETY DATA SHEET

PRODUCT CODE: 013

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP013 PART A
PRODUCT CODES: 013 A

MANUFACTURER: National Polymers Inc.
STREET ADDRESS: 9 Guttman Avenue
CITY, STATE, ZIP: Charleroi, Pa. 15022

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Gary Zippay

DATE REVISED: 8/14/19

Chemical Name or Class: Epoxy mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Specific target organ toxicity – single exposure category 3, Skin sensitization category 1

GHS Label Elements and Precautionary Statements:

Label Elements: Exclamation Mark



Hazard Statements:

Warning: May cause drowsiness or dizziness.

Warning: May cause an allergic skin reaction.

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves and clothing to prevent skin contact.

Response:

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352 IF ON SKIN: wash with plenty of soap and water.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

HMIS HAZARD CLASSIFICATION

HEALTH: 2 **FLAMMABILITY:** 1 **REACTIVITY:** 0 **PERSONAL PROTECTIVE EQUIPMENT:** G

POTENTIAL HEALTH EFFECTS

EYES:

THIS MATERIAL CAN CAUSE EYE IRRITATION OR REDNESS.

SKIN:

IRRITATION TO THE SKIN CAN OCCUR BUT DERMAL ABSORPTION TOXICITY IS LOW.

INGESTION:

INGESTION OF MATERIAL CAN CAUSE NAUSEA AND OTHER SIMILAR RESPONSES.

INHALATION:

HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA, AND DIZZINESS.

HEALTH HAZARDS (ACUTE AND CHRONIC):

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO CONSTITUENTS OF THIS PRODUCTS ARE REGULATED AS CARCINOGENS UNDER OSHA, IARC, OR NTP PROGRAMS.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>	<u>WEIGHT %</u>
Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis-, homopolymer	25085-99-8	NONE	NONE	NONE	30-60
Water	7732-18-5	NONE	NONE	NONE	30-60
Propylene Glycol Monomethyl Ether	107-98-2	100PPM	100PPM	150PPM	10-30
Polyether and polyethersiloxane emulsion	Not Available	NONE	NONE	NONE	0.1-1
Butylated hydroxytoluene (component of Polyether and polyethersiloxane emulsion)	128-37-0	10mg/m3	10mg/m3	NONE	<0.00001
Ethanol, 2-amino- (component of Polyether and polyethersiloxane emulsion)	141-43-5	3ppm	NONE	NONE	<0.005
cyclohexane (component of Polyether and polyethersiloxane emulsion)	110-82-7	300ppm	300ppm	NONE	<0.00001
Ethanol (component of Polyether and polyethersiloxane emulsion)	64-17-5	1000ppm	1000ppm	NONE	<0.0001
poly(oxy-1,2-ethanediyl), a-octadecyl-w-w-hydroxy- (component of Polyether and polyethersiloxane emulsion)	9005-00-9	NONE	NONE	NONE	<0.1

Propylene Glycol Monomethyl Ether CAS # 107-98-2 (ACGIH) STEL=150PPM.

Follow 311b (2) (A) 40 CFR 116,117, Guidelines. Follow TSCA 8 (a) 40 CFR 712, 47 FR 26992 Guidelines

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS. GET IMMEDIATE MEDICAL ASSISTANCE.

SKIN:

FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,
(% by volume)

UPPER: not available
LOWER: not available

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTERS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NO UNUSUAL FIRE HAZARDS KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID TO SALVAGE TANK. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBANT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

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OTHER PRECAUTIONS:

MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS.

VENTILATION:

AVOID BREATHING VAPORS, VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES, NEOPRENE OR RUBBER.

EYE PROTECTION:

SPLASH PROOF GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

CLEAN BODY COVERING CLOTHING AS WELL AS APRON FOOTWEAR OR OTHER EQUIPMENT SHOULD BE USED AS DEEMED NECESSARY TO AVOID CONTACT WITH THE MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID

BOILING POINT OR RANGE ° F: 212

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H2O = 1): 1.0

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: EMULSIFIABLE

Odor Threshold: N/A

pH: N/A

Melting point/freezing point: N/A

Vapor Pressure: N/A

Auto Ignition Temperature: N/A

Partition Coefficient: n-octanol/water: N/A

Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID CONTACT WITH OPEN FLAMES AND ALL SOURCES OF IGNITIONS AND SPARKS.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS, MINERAL ACIDS AND EPOXY RESINS IN UNCONTROLLED AMOUNTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO, CO2, NOX

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.

Component data: Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis-,homopolymer CAS# 25085-99-8 and Water CAS# 7732-18-5

INGESTION EFFECTS: No data available.

INHALATION EFFECTS: This component presents an elevated inhalation health risk when used in spray or aerosol applications.

EFFECTS ON SKIN: No data available.

EFFECTS ON EYES: Contact with eyes may cause irritation.

SYMPTOMS: no data available

Acute Oral Toxicity: No data available on the product itself

Inhalation: No data available on the product itself

Acute Dermal Toxicity: No data available on the product itself

Skin corrosion/irritation: Non-irritant to the skin of a rabbit.

Serious eye damage/irritation: Mild eye irritation.

Sensitization: May cause sensitization by skin contact.

Chronic toxicity or effects from long term exposures

Carcinogenicity: No data available.

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Reproductive toxicity: No data available
Germ cell mutagenicity: No data available
Specific target organ systemic: No data available
Toxicity (single exposure): No data available
Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure:
This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction, skin disorders and Allergies.
Component CAS# 107-98-2: Ingestion LD50 rat 4016 mg/kg, Dermal LD50 rabbit >2000 mg/kg, Inhalation LC50 6 hr Vapor, rat >25.8 mg/l. May cause eye or skin irritation. May affect Kidney or liver. Has been reported to be toxic to fetus in laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component data: Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis-,homopolymer CAS# 25085-99-8 and Water CAS# 7732-18-5:

ECOTOXICITY EFFECTS

AQUATIC TOXICITY: No data available on the product itself.

TOXICITY TO OTHER ORGANISMS: No data available.

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY: No data available on the product itself.

MOBILITY: No data available.

BIOACCUMULATION: No data available on the product itself.

Component CAS# 107-98-2: Bioconcentration potential is low (BCF less than 100). Potential for mobility in soil is high (KOC between 0 and 50). Material is readily biodegradable and is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100mg/l in the most sensitive species tested.. LC50 fathead minnow 96 hr 20800 mg/l, LC50 water flea 48 hr lethally 23300 mg/l, EbC50 green algae biomass growth inhibition 7 d >1000 mg/l. Toxicity to microorganisms IC50 activated sludge > 1000 mg/l

Component Polyether and Polysiloxane emulsion: Product is considered a weak water pollutant (German Law)

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: Not Regulated

IMO/IMDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component data: Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis-,homopolymer CAS# 25085-99-8 and Water CAS# 7732-18-5:

Toxic Substance Control Act (TSCA) 12(b) Component(s): None

COUNTRY	REGULATORY LIST	NOTIFICATION
USA	TSCA	Included on inventory
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
CANADA	DSL	Included on inventory
AUSTRALIA	AICS	Included on inventory
JAPAN	ENCS	Included on inventory
SOUTH KOREA	ECL	Included on inventory
CHINA	SEPA	Included on inventory
PHILLIPINES	PICCS	Included on inventory

EPA SARA Title III Section 312 (40CFR 370) Hazard classification: Acute Health Hazard

EPA SARA Title III Section 313 (40CFR 372) Component(s) above the "de minimus" level: None

USA California Safe Drinking Water & Toxic Enforcement Act (Proposition 65): This product does not contain any chemicals known to the state of California to cause cancer, birth defects or any other harm.

Component CAS# 107-98-2; on the PA right to know list. Product is on the TSCA list and DSL Canada

Component Polyether and Polysiloxane emulsion: Component Cyclohexane CAS# 110-82-7 is a SARA Section 313 Chemical. Product is on the Pennsylvania, Rhode Island, New Jersey WHMIS and Massachusetts Right to know lists. Product components are on the TSCA and Canada DSL lists.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, however, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available

See Section 1 for date of preparation

SAFETY DATA SHEET

PRODUCT CODE: 013

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP013 PART B
PRODUCT CODES: 013 B

MANUFACTURER: National Polymers Inc.
STREET ADDRESS: 9 Guttman Avenue
CITY, STATE, ZIP: Charleroi, Pa. 15022

INFORMATION PHONE: 724-483-9300
EMERGENCY PHONE: Chemtrec 800-424-9300
FAX PHONE: 724-483-9306

PREPARED BY: Gary Zippay

DATE REVISED: 8/14/19

Chemical Name or Class: Amine mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Skin corrosion/irritation category 2, Serious eye irritation category 1, Skin sensitization category 1, Specific target organ toxicity – single exposure category 3, Acute hazard to aquatic environment category 3

GHS Label Elements and Precautionary Statements:

Label Elements: Corrosion, Exclamation Mark



Hazard Statements:

Warning: causes skin irritation

Danger: Causes serious eye damage

Warning: May cause drowsiness or dizziness.

Warning: May cause an allergic skin reaction.

Harmful to aquatic life

Precautionary Statements

P102 Keep out of reach of children.

P103 Read label before use

P264 Wash hands thoroughly after handling.

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

Response:

P302 + P352 IF ON SKIN: wash with plenty of soap and water.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P362 + P364 take off contaminated clothing and wash it before reuse.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 If in eyes, immediately call a POISON CENTER or doctor/physician.

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

P405 Store locked up.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws.

HMIS HAZARD CLASSIFICATION

HEALTH: 2 **FLAMMABILITY:** 1 **REACTIVITY:** 0 **PERSONAL PROTECTIVE EQUIPMENT:** G

POTENTIAL HEALTH EFFECTS

EYES:

THIS MATERIAL CAN CAUSE EYE IRRITATION OR REDNESS.

SKIN:

IRRITATION TO THE SKIN CAN OCCUR BUT DERMAL ABSORPTION TOXICITY IS LOW.

INGESTION:

INGESTION OF MATERIAL CAN CAUSE NAUSEA OR OTHER SIMILAR RESPONSES.

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INHALATION:

HIGH CONCENTRATIONS OF VAPOR CAN CAUSE IRRITATION TO THE RESPIRATORY TRACT, NAUSEA, AND DIZZINESS.

HEALTH HAZARDS (ACUTE AND CHRONIC):

PROLONGED OR REPEATED EXPOSURE MAY CAUSE ASTHMA AND SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

NO CONSTITUENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS UNDER OSHA, IARC, OR NTP PROGRAMS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>	<u>WEIGHT %</u>
Tetraethylenepentamine	112-57-2	NE	NE	NE	1-5
Polyamine Polymer	NJTSRN 05995500-(H401-I)	NE	NE	NE	30-60
Poly (oxy(methyl-1,2-ethanediy), alpha-(2-aminomethyl)-omega-(2-amonmethylethoxy)	9046-10-0	NE	NE	NE	1-5
Water	7732-18-5	NONE	NONE	NONE	30-60
Propylene Glycol Monomethyl Ether	107-98-2	100PPM	100PPM	150PPM	10-30

SECTION 3 NOTES:

No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.

PROPYLENE GLYCOL MONOMETHYL ETHER CAS # 107-98-2 (ACGIH) STEL= 150PPM

FOLLOW 311b (2) (A) 40 CFR 116, 117, GUIDELINES, FOLLOW TSCA 8(A) 40 CFR 712, 47 FR 26992 GUIDELINES

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES

EYES:

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE LIFTING UPPER AND LOWER LIDS. GET IMMEDIATE MEDICAL ASSISTANCE.

SKIN:

FLUSH SKIN WITH WATER FOR AT LEAST 15 MINUTES AND REMOVE ALL CONTAMINATED CLOTHING IMMEDIATELY. GET MEDICAL ATTENTION IF REDDENING OR SWELLING OCCURS.

INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

REMOVE TO FRESH AIR IF EFFECTS PERSIST AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,
(% by volume)

UPPER: not available
LOWER: not available

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

TOXIC FUMES WILL BE EVOLVED WHEN THIS MATERIAL IS INVOLVED IN A FIRE. A SELF-CONTAINED BREATHING APPARATUS SHOULD BE AVAILABLE FOR FIRE FIGHTING. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

AVOID CONTACT WITH MATERIAL. WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. PUMP LIQUID TO SALVAGE TANK. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBANT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS. RESEAL PARTIALLY USED CONTAINERS. PROPERLY LABEL ALL CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. OBSERVE CONDITIONS OF GOOD INDUSTRIAL HYGIENE AND SAFE WORKING PRACTICES.

OTHER PRECAUTIONS:

MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS OF ALL COMPONENTS TO BECOME FAMILIAR WITH ALL HAZARDS PRIOR TO USING THIS PRODUCT.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

NIOSH APPROVED RESPIRATOR PROTECTION REQUIRED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROLS.

VENTILATION:

AVOID BREATHING VAPORS. VENTILATION MUST BE SUFFICIENT TO CONTROL VAPORS.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES – NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH PROOF GOGGLES OR GLASSES WITH SIDE SHIELDS

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID

BOILING POINT OR RANGE ° F: 212

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H2O = 1): 1.0

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: EMULSIFIABLE

Odor Threshold: N/A

pH: N/A

Melting point/freezing point: N/A

Vapor Pressure: N/A

Auto Ignition Temperature: N/A

Partition Coefficient: n-octanol/water: N/A

Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID:

AVOID CONTACT WITH OPEN FLAMES AND ALL SOURCES OF IGNITIONS AND SPARKS.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS , MINERAL ACIDS, AND EPOXY RESINS IN UNCONTROLLED AMOUNTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO, CO2, NOX

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component Polyamine Polymer: INGESTION LD50 > 2000 mg/kg (rat), Skin LD50 >2000 mg/kg (rat), may cause sensitization by skin contact. May cause eye and skin irritation.

Component CAS# 107-98-2: Ingestion LD50 rat 4016 mg/kg, Dermal LD50 rabbit >2000 mg/kg, Inhalation LC50 6 hr Vapor, rat >25.8 mg/l. May cause eye or skin irritation. May affect Kidney or liver. Has been reported to be toxic to fetus in laboratory animals.

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component Polyamine Polymer: Aquatic Toxicity: EC50(24hr) >10 mg/l (species Daphnia magna); EC50(48 hr) 1.21 mg/l (species Daphnia magna. Product is not readily biodegradable.

Component CAS@ 107-98-2: Bioconcentration potential is low (BCF less than 100). Potential for mobility in soil is high (KOC between 0 and 50). Material is readily biodegradable and is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100mg/l in the most sensitive species tested.. LC50 fathead minnow 96 hr 20800 mg/l, LC50 water flea 48 hr lethally 23300 mg/l, EbC50 green algae biomass growth inhibition 7 d >1000 mg/l. Toxicity to microorganisms IC50 activated sludge > 1000 mg/l

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF MATERIAL ACCORDING TO FEDERAL, STATE, AND LOCAL REGULATIONS.

SECTION 14: Transport Information

DOT: Not Regulated

IMO/MDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component Polyamine Polymer: WHMIS trade secret Registry number – 5491. Included on TSCA inventory. Included on the EINECS inventory

Component CAS# 107-98-2; on the PA right to know list. Product is on the TSCA list and DSL Canada

Component Tetraethylenepentamine: Is on the TSCA and Canada DSL lists

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available

See Section 1 for date of preparation