

SAFETY DATA SHEET

PRODUCT CODE: 030

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP030 PART A
PRODUCT CODES: 030 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: Harry Jackson

DATE REVISED: 1/2/15

Chemical Name or Class: Polyurethane dispersion

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Serious eye irritation category 2A, acute hazard to aquatic environment category 3

GHS Label Elements and Precautionary Statements: Exclamation Mark



Hazard Statements:

Warning: Causes serious eye irritation
Harmful to aquatic life

Precautionary statements:

P102 Keep out of reach of children.
P103 Read label before use
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Response:

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

P337 + P313 IF eye irritation persists: Get medical advice/attention.

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:

CORNEAL DAMAGE MAY OCCUR BUT THIS EFFECT IS USUALLY REVERSIBLE AS LONG AS TREATMENT IS ADMINISTERED.

SKIN:

IRRITATION TO THE SKIN CAN OCCUR.

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: YES NTP: YES IARC: YES

ADDITIONAL CARCINOGENICITY INFORMATION:

THIS PRODUCT CONTAINS VERY SMALL AMOUNTS OF SUBSTANCES THAT ARE REGULATED BY OSHA AS ANTICIPATED HUMAN CARCINOGENS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>	<u>WEIGHT %</u>
Polyurethane Dispersion NJTSR# (31765300002)-5228P		NONE	NONE	NONE	30-60
*Triethylamine (component of polyurethane dispersion)	121-44-8	10PPM	10PPM	15PPM	<0.06
*N-Methyl-2-Pyrrolidone (component of polyurethane dispersion)	872-50-4	100PPM	100PPM	100PPM	9
Adipic Acid (component of Polyurethane dispersion)	124-04-9	NONE	5mg/m3	NONE	0.1-1
ethylenediamine	107-15-3	10ppm	10ppm	NONE	0.1-1
Acrylic Polymer	Non Hazardous	NONE	NONE	NONE	10-30
Water	7732-18-5	NONE	NONE	NONE	30-60
Individual Residual monomers	Not Required	NONE	NONE	NONE	<0.1%
Antifoam Emulsion	Non Hazardous	NONE	NONE	NONE	0.1-1
Propylene Glycol Monomethyl Ether	107-98-2	100PPM	100PPM	150PPM	1-5
2,5,8,11 tetramethyl 6 dodecyn-5,8 diol ethoxylate	169117-72-0	none	none	none	0.1-1
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

SECTION 3 NOTES:

*** Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.
 Triethylamine (ACGIH) STEL=15PPM. N-Methyl Pyrrolidone (As Recommended by the Manufacturer) TWA=100PPM.
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 FIGHTERS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NO UNUSUAL FIRE HAZARDS KNOWN.

SECTION 6: RELEASE MEASURES

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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.

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 OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID - CLEAR

BOILING POINT OR RANGE: ° F - 192 TO 396

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H2O = 1): 1.0

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: EMULSIFIABLE DISPERSION

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. AVOID TEMPERATURES BELOW 35 DEGRES F.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS, AND MINERAL ACIDS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO, CO2, NOX

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

No data for the product itself.

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Component data:

Component Polyurethane Dispersion: No data available for this product

Component n-Methyl-2-pyrrolidone:

Acute oral toxicity

LD50: 3,600 - 7,900 mg/kg (Rat)

Acute inhalation toxicity

LC50: > 5.1 mg/l, 4 h (rabbit)

Acute dermal toxicity

LD50: > 5,000 mg/kg (rabbit)

Skin irritation

rabbit, Draize, Slightly irritating

Eye irritation

rabbit, Moderately irritating

Sensitisation

dermal: non-sensitizer (Guinea pig, Other method)

dermal: non-sensitizer (Human, Patch Test)

Repeated dose toxicity

90 Days, inhalation: NOAEL: 0.5 mg/l, (Rat, Male/Female, 6 hrs/day 5 days/week)

Irritation to lungs and nasal cavity. Reduced body weight gain. Reduced testicular weights, testicular atrophy.

4 weeks, oral: NOAEL: 277 mg/kg, (mouse, Male/Female, ad libitum)

Changes in: liver

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse)

negative

Carcinogenicity

Rat, inhalation, 2 Years,

negative

Toxicity to Reproduction/Fertility

Two generation study, inhalation, 6 hrs/day 7 days/week, (Rat) NOAEL (parental): 130 ppm, NOAEL (F1): 50 ppm, NOAEL (F2): 50 ppm

No toxicity to reproduction, The only adverse effect was a decrease in fetal weights.

Two generation study, oral, (Rat) NOAEL (parental): 160 mg/kg, NOAEL (F1): 160 mg/kg,

Fertility and mating indices were decreased. The survival and growth rates were reduced.

Developmental Toxicity/Teratogenicity

Rat, inhalation, 6 hrs/day 7 days/week, NOAEL (teratogenicity): 0.36 mg/l,

No Teratogenic effects observed at doses tested.

Rat, oral, NOAEL (teratogenicity): 125 mg/kg,

Oral administration of methylpyrrolidone at 500 mg/kg/d in pregnant rats resulted in embryonic loss and fetal malformations, including anasarca, anal atresia, cardiovascular, and skeletal defects. There was a single malformed fetus at 250 mg/kg/d with abnormalities similar to those observed in the 500 mg/kg/d group, and no increase in developmental effects at a maternal dose of 125 mg/gk/d.

Component Adipic Acid:

Acute oral toxicity

LD50: > 5,000 mg/kg (Rat)

Acute inhalation toxicity

LC50: > 7.7 mg/l, 1 h (Rat)

Skin irritation

rabbit, Slightly irritating

Eye irritation

rabbit, Moderate eye irritation

Sensitisation

non-sensitizer (Guinea pig)

Repeated dose toxicity

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4 w, Oral: NOAEL: 40 mg/d, (Rat, female)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Genetic Toxicity in Vivo:

Cytogenetic assay: (mouse,)

Carcinogenicity

Rat, Male/Female, oral, 2 y,

Negative

Developmental Toxicity/Teratogenicity

Rat, female, oral, NOAEL (teratogenicity): 288 mg/kg, NOAEL (maternal): 288 mg/kg,

No fetotoxicity observed at doses tested.

Component Triethylamine (TEA)

Acute oral toxicity

LD50: 460 mg/kg (Rat)

Acute inhalation toxicity

LC50: 4.2 - 8.4 mg/l, 4 h (Rat)

Acute dermal toxicity

LD50: 416 - 420 mg/kg (rabbit)

Skin irritation

rabbit, Corrosive

Eye irritation

rabbit, Corrosive

Sensitisation

Did not cause sensitization on laboratory animals.

Repeated dose toxicity

28 wks, inhalation: NOAEL: 1 mg/l, (rat, Male/Female, daily)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)

Carcinogenicity

Rat, female, oral, 1 year, daily,

Did not show carcinogenic effects in animal experiments.

Component Ethylenediamine:

Acute oral toxicity

LD50: 1,160 mg/kg (rat)

Acute inhalation toxicity

LC50: 5 - 10 mg/l, 8 h (rat)

Acute dermal toxicity

LD50: 730 mg/kg (rabbit)

Skin irritation

rabbit, Severely irritating

Eye irritation

rabbit, Severely irritating

Repeated dose toxicity

90 d, oral: NOAEL: 100 mg/kg, (mouse,)

Mutagenicity

Genetic Toxicity in Vitro:

Ames: negative

Negative results were reported in various in vitro studies.

Carcinogenicity

negative

Developmental Toxicity/Teratogenicity

mouse, female, oral, daily, NOAEL (teratogenicity): Not established, NOAEL (maternal): 400 mg/kg,

Components 2,5,8,11 tetramethyl 6 dodecyn-5,8 diol ethoxylate CAS# 169117-72-0: LD50 Ingestion >2000 mg/kg – rat; Dermal LD 50 >2000 mg/kg – rabbit; severe eye irritant; mild skin irritant; Not mutagenic in Ames test.

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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 effect 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 Polyurethane Dispersion: No data available for this product.

Component n-Methyl-2-pyrrolidone

Biodegradation

Aerobic, 90 %, Exposure time: 8 Days

Readily biodegradable.

Acute and Prolonged Toxicity to Fish

LC50: Approximately 832 mg/l (Bluegill (*Lepomis macrochirus*), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: Approximately 4,897 mg/l (Water flea (*Daphnia magna*), 48 h)

Toxicity to Aquatic Plants

EC50: > 500 mg/l, (Green algae (*Selenastrum capricornutum*))

Component Adipic Acid:

Biodegradation

aerobic, > 90 %, Exposure time: 5 d

100 %, Exposure time: 28 d, i.e. readily biodegradable

Biochemical Oxygen Demand (BOD)

598 mg/g

Theoretical Biological Oxygen Demand (ThBOD)

1,423 mg/g

Bioaccumulation

Does not bioaccumulate.

Acute and Prolonged Toxicity to Fish

EC50: 230 mg/l (Golden orfe (*Leuciscus idus*), 96 h)

Acute Toxicity to Aquatic Invertebrates

EC50: 85.7 mg/l (Water flea (*Daphnia magna*), 48 h)

Toxicity to Aquatic Plants

31.3 mg/l, End Point: growth (Green algae (*Scenedesmus subspicatus*), 72 h)

Toxicity to Microorganisms

EC0: 10,000 mg/l, (*Pseudomonas fluorescens*, 16 h)

Component Triethylamine (TEA)

Biodegradation

aerobic, 96 %, Exposure time: 21 d, Readily biodegradable.

Bioaccumulation

Oryzias latipes (Orange-red killifish), Exposure time: 42 d, < 0.5 BCF

Acute and Prolonged Toxicity to Fish

LC50: 43.7 mg/l (Fathead minnow (*Pimephales promelas*), 96 h)

Harmful to aquatic organisms.

Acute Toxicity to Aquatic Invertebrates

EC50: 200 mg/l (*Daphnia magna* (Water flea), 48 h)

Toxicity to Aquatic Plants

EC50: 1 mg/l, (other: algae, 96 h)

Toxicity to Microorganisms

EC50: 95 mg/l, (*Pseudomonas putida*, 17 h)

Component Ethylenediamine:

Biodegradation

Readily biodegradable.

> 60 %, Exposure time: 28 d, i.e. readily biodegradable

Bioaccumulation

ca. 0.07 BCF

Does not bioaccumulate.

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Acute and Prolonged Toxicity to Fish

LC50: Approximately 405 mg/l (Golden orfe (*Leuciscus idus*))

Acute Toxicity to Aquatic Invertebrates

EC50: 19 mg/l (Water flea (*Daphnia magna*), 24 h)

Toxicity to Aquatic Plants

EC0: 20 mg/l, (other: algae)

Component Antifoam Emulsion: Silicone content Biologically not degradable. Behaviour in environmental compartments: Mobility – Absorbed by floating particles, separation by sedimentation. Bioaccumulation is not expected to occur. According to past experience, toxicity to fish is improbable. BOD5 Value = 20 mg/g O2/g. COD Value = 280 mg/g O2/g

Components 2,5,8,11 tetramethyl 6 dodecyn-5,8 diol ethoxylate CAS# 169117-72-0: This product is anticipated to be harmful to aquatic organisms based on data from similar product.

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: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS triethylamine) , 9, PGIII,

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component Polyurethane Dispersion:

OSHA Hazcom Standard Rating: Hazardous

US. Toxic Substances Control Act: Listed on the TSCA Inventory.

US. EPA CERCLA Hazardous Substances (40 CFR 302):

Polyurethane Dispersion Component information:

Adipic Acid Reportable quantity: 5000 lbs

Triethylamine (TEA) Reportable quantity: 5000 lbs

SARA Section 311/312 Hazard Categories:

Acute Health Hazard, Chronic Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):

Components

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Components

n-Methyl-2-pyrrolidone

Triethylamine (TEA)

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261)

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Weight percent Components CAS-No.

>=1% Water 7732-18-5

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>=1% Polyurethane Resin CAS# is a trade secret

10 - 20% n-Methyl-2-pyrrolidone 872-50-4

5 - 10% Adipic Acid 124-04-9

1 - 5% Triethylamine (TEA) 121-44-8

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

Weight percent Components CAS-No.

10 - 20% n-Methyl-2-pyrrolidone 872-50-4

1 - 5% Triethylamine (TEA) 121-44-8

0.1 - 1% Ethylenediamine 107-15-3

MA Right to Know Extraordinarily Hazardous Substance List:

Weight percent Components CAS-No.

0.1 - 1% Ethylenediamine 107-15-3

California Prop. 65:

Warning! This product contains chemical(s) known to the State of California to be - Developmental toxin.

Weight percent Components CAS-No.

10 - 20% n-Methyl-2-pyrrolidone 872-50-4

Component Antifoam Emulsion: Is on TSCA list. This component may contain trace amounts of Proposition 65 Carcinogens such as Formaldehyde CAS# 50-00-0 and Acetaldehyde CAS# 75-07-0. This component contains Amorphous precipitated silica CAS# 112926-00-8 which is on the Massachusetts, New Jersey and Pennsylvania Right to know hazardous substance list. Component is listed on the Canada DSL., IECSC, EINECS, TSCA, PICCS, ENCS, ECL, and AICS lists.

Components 2,5,8,11 tetramethyl 6 dodecyn-5,8 diol ethoxylate CAS# 169117-72-0: WHMIS Hazard classification – Toxic material causing other toxic effects.. Product is on TSCA, EINECS, AICS, ENCS, ECL, SEPA, PICCS, DSL inventory lists.

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 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

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PRODUCT CODE: 030

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP030 PART B
PRODUCT CODES: 030 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: Harry Jackson

DATE REVISED: 1/2/15

Chemical Name or Class: aziridine polymer

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Serious eye irritation category 1, Germ Cell Mutagenicity category 2, skin sensitization category 1, Specific target organ toxicity repeated exposure category 2

GHS Label Elements and Precautionary Statements: Exclamation Mark, Corrosion, Health hazard



Hazard Statements:

Danger: Causes serious eye damage.

Warning: Suspected of causing genetic defects

Warning: May cause an allergic skin reaction.

Warning: May cause damage to organs through prolonged or repeated exposure (oral)

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use

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

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P260 Do not breathe dust/fume/gas/mist/vapours/spray

Response:

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.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

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

P314 Get medical advice/attention if you feel unwell.

Storage:

P405 Store locked up.

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:

WILL CAUSE BURNS TO THE EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES AS WELL AS REDDENING OR TEARING.

SKIN:

THIS PRODUCT IS A MILD SKIN IRRITANT THAT MAY CAUSE SKIN IRRITATION.

INGESTION:

LIQUID CAN CAUSE SEVERE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

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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. EFFECTS OF CHRONIC EXPOSURE HAS SHOWN IN TESTING, A MILDLY POSITIVE RESPONSE IN THE AMES MUTAGENICITY SCREENING TESTS (AMES SALMONELLA TEST).

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS AS WELL AS PRE-EXISTING SKIN AND EYE DISORDERS MAY BE AGGRAVATED.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

SEE CHRONIC HEALTH HAZARDS ABOVE FOR INFORMATION ON EFFECTS OF CHRONIC EXPOSURE AND THE POSSIBLE HEALTH EFFECTS.

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>
Polyfunctional Aziridine Crosslinker	64265-57-2	NONE	NONE	NONE	60-100

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. The actual chemical name of the Polyfunctional Aziridine Crosslinker is: 2-ethyl-2-[[[(3-(2-methylaziridin-1-yl)propionnyl)methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)]

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:

DILUTE BY GIVING WATER OR MILK TO DRINK IF VICTIM IS CONSCIOUS AND INDUCE VOMITING. 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: 267+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:

WEAR THE APPROPRIATE SAFETY EQUIPMENT. STOP SPILL AT SOURCE, DYKE AREA TO PREVENT SPREADING. NEUTRALIZE WITH 5% ACETIC ACID. TAKE UP REMAINDER WITH CLAY OR OTHER ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

SAFETY DATA SHEET

PRODUCT CODE: 030

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. FOR EMERGENCIES A SELF-CONTAINED BREATHING APPARATUS OR A FULL FACE RESPIRATOR IS RECOMMENDED.

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 OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: AMBER CLEAR LIQUID

BOILING POINT OR RANGE: N/A

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 1): 1.1

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: PARTIALLY SOLUBLE

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. AVOID CONTACT WITH MOISTURE OR ACIDIC MATERIALS.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND ACIDIC MATERIALS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO, CO₂, NOX

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

Component Polyfunctional Aziridine Crosslinker: LD50 Oral Rat 3038 mg/kg; LDLo Dermal Rabbit 2 g/kg. skin Mammal – species

unspecified: Sensitising. Experiment: In vitro Subject: Mammalian-Animal Metabolic activation:

Chromosomal Abberation Chinese Hampster – Positive. Micronucleus test Experiment: In vivo Subject: Mammalian-

Animal Metabolic activation: Chromosomal Abberation Mouse Micronucleus – Positive. Ames test Subject: Bacteria -Positive.

SECTION 12: ECOLOGICAL INFORMATION

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil - Soil/water partition coefficient (K_{oc})

Not available.

Mobility Not available.

Results of PBT and vPvB assessment

PBT : Not applicable.

P: Not available. B: Not available. T: Not available.

vPvB : Not applicable.vP: Not available. vB: Not available.

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/IMDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

Component Polyfunctional Aziridine crosslinker:

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Mutagenic effects

Muta. 2, H341 - -

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification Justification

Skin Irrit. 2, H315 Calculation method

Eye Dam. 1, H318 Calculation method

Skin Sens. 1, H317 Calculation method

Muta. 2, H341 Calculation method

Full text of abbreviated R phrases

R68- Possible risk of irreversible effects.

R41- Risk of serious damage to eyes.

R38- Irritating to skin.

R43- May cause sensitisation by skin contact.

Full text of abbreviated H statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H341 Suspected of causing genetic defects.

Full text of classifications [CLP/GHS]

:Eye Dam. 1, H318: SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

Muta. 2, H341: GERM CELL MUTAGENICITY - Category 2

SAFETY DATA SHEET

PRODUCT CODE: 030

Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1, H317: SKIN SENSITIZATION - Category 1

Full text of classifications [DSD/DPD]

: Muta. Cat. 3 - Mutagen category 3

Xi - Irritant

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