

SAFETY DATA SHEET

PRODUCT CODE: 928HV

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP928HV PART A
PRODUCT CODES: 928HV 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: 6/16/16

Chemical Name or Class: Novolac Epoxy/blocked isocyanate mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Serious eye damage/Eye irritation category 2A, Skin irritation category 2, skin sensitizer category 1, Toxic to reproduction category 2, Long term hazards to aquatic environment Category 3

GHS Label Elements and Precautionary Statements:

Label Elements: Exclamation Mark, Health Hazard, Aquatic Toxicity



Hazard Statements:

Warning: Causes serious eye irritation.

Warning: Causes skin irritation.

Warning: May cause an allergic skin reaction.

Warning: Suspected of damaging fertility of the unborn child.

Harmful to aquatic life with long lasting effects.

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

P201 Obtain special instructions before use.

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

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.

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

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

Storage:

P405 Store locked up

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

Other Non-classifiable potential hazards

Carcinogen category 2

HMIS HAZARD CLASSIFICATION

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

POTENTIAL HEALTH EFFECTS

EYES:

MAY CAUSE IRRITATION BUT NO CORNEAL INJURY IS LIKELY.

SKIN:

MAY CAUSE IRRITATION OR ALLERGIC SKIN RESPONSE.

INGESTION:

THIS MATERIAL HAS A PROBABLE LOW ACUTE ORAL TOXICITY.

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INHALATION:

NO GUIDE FOR CONTROL KNOWN, HOWEVER, EXPOSURE TO HEATED VAPORS CAN CAUSE IRRITATION TO THE NOSE, THROAT OR MUCOUS MEMBRANES..

HEALTH HAZARDS (ACUTE AND CHRONIC):

EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATION OF VAPOR. EYES: INJURY IF UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: yes IARC: yes

ADDITIONAL CARCINOGENICITY INFORMATION:

Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B). crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline Silica is also listed by the NTP as a known human carcinogen

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>
BISPHENOL F/EPICHLOROHYDRIN EPOXY RESIN					
	9003-36-5	NONE	NONE	NONE	10-30
Epoxy phenol novolac resin	28064-14-4	NONE	NONE	NONE	10-30
Alkyl Phenol	84852-15-3	NONE	NONE	NONE	1-5
Alkyl Phenol blocked Isocyanate					
	NJTSRN(31765300002) - 6184P	NONE	NONE	NONE	30-60
Titanium Dioxide	13463-67-7	10mg/m3	10mg/m3	5mg/m3	1-5
Cellulose	9004-34-6	15mg/m3	10mg/m3	NONE	0.1-1
Kaolin	1332-58-7	15mg/m3	10mg/m3	NONE	0.1-1
Precipitated Silica	112926-00-8	NONE	80mg/m3	NONE	0.1-1
Hydrophobic Silica	67762-90-7	6mg/m3	10mg/m3	NONE	3-7
Talc	14807-96-6	20mg/m3	20mg/m3	20mg/m3	1-5
*crystalline silica (as a component of talc)	14808-60-7	0.05 mg/m3	0.025 mg/m3	0.05 mg/m3	(<1.0%)

SECTION 3 NOTES: *No toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.

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

SECTION 4: FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

LOW IN TOXICITY, INDUCE VOMITING ONLY IF LARGE AMOUNTS OF MATERIAL ARE INGESTED, AND OTHERWISE DO NOT INDUCE VOMITING. IN EITHER CASE CONSULT WITH A PHYSICIAN.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: not available
(% by volume) LOWER: not available

FLASH POINT: 200+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER CONFINED AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL 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:

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WEAR RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF THE SOURCE AT THE LEAK. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBENT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE IN A COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. MIXED MATERIALS CONTAIN THE HAZARDS OF ALL THE COMPONENTS, THEREFORE, READ THE MSDS'S OF ALL THE COMPONENTS PRIOR TO USING MATERIAL. PROPERLY LABEL ALL CONTAINERS

OTHER PRECAUTIONS:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. CONTAMINATED LEATHER ARTICLES CAN NOT BE CLEANED AND MUST BE DISCARDED IF CONTAMINATED WITH THIS PRODUCT. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. GENERAL EXHAUST IS USUALLY SUFFICIENT IN LIEU OF NIOSH RESPIRATOR

VENTILATION :

GENERAL EXHAUST IS USUALLY SUFFICIENT TO CONTROL VAPORS AND EXPOSURE HAZARDS

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES – NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH 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: MEDIUM VISCOSITY LIQUID – WHITE OPAQUE COLORING

BOILING POINT OR RANGE: 392F

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H2O = 1): 1.2

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

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 EXCESSIVE HEAT OR OPEN FLAMES.

INCOMPATIBILITY (MATERIAL TO AVOID):

CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS AND STRONG LEWIS ACIDS OR MINERAL ACIDS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

CO₂, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

SAFETY DATA SHEET

PRODUCT CODE: 928HV

No data for the product itself.

Component data:

Component BISPHENOL F/EPICHLOROXYDRIN EPOXY RESIN CAS# 9003-36-5: Acute Oral Effects: LD50 (rat) >5000 mg/kg. Acute Dermal Toxicity (rabbit) >3000 mg/kg. Inhalation toxicity LC50 (rat) >1.7 mg/l air for a 4-hr aerosol exposure (maximum concentration obtained). Sensitization (guinea pig) causes sensitization. Skin Irritation (rabbit) Causes moderate irritation. Eye irritation (rabbit) Causes slight irritation.

Component Epoxy phenol novolac resin CAS# 28064-14-4: LD50 Oral: >4000 mg/kg (adult rat). LD50 skin (adult rabbit) >2000 mg/kg. Mutagenicity was negative in in-vivo genotoxicity assays. Mixed results were seen in in-vitro genotoxicity assays.

Components Alkyl Phenol CAS# 84852-15-3 and Alkyl Phenol blocked Isocyanate NJTSRN(31765300002) - 6184P: Acute Oral toxicity LD50 >5000 mg/kg. Skin Irritation: exposure time 4hr – no skin irritation. Eye irritation: slightly irritating (rabbit). Mutagenicity: Genetic Toxicity in vitro: Ames – negative (salmonella typhimurium).

Components Alkyl Phenol CAS# 84852-15-3: Acute Oral Toxicity LD50: 1,300 mg/kg (rat) Acute Dermal Toxicity LD50: 2031 mg/kg (rabbit). Skin Irritation: rabbit, OECD test guideline 404, corrosive. Eye Irritation: rabbit, OECD test guideline 405, irritating to eyes. Sensitization: Dermal, not sensitizer (guinea pig, maximization test. Repeated Dose Toxicity: 28 day, oral, NOAEL, 100mg/kg (rat, male/female, daily). Mutagenicity: Genetic toxicity in vitro, Ames – negative results were reported in various in vitro studies (salmonella typhimurium, Metabolic Activation; with/without). Genetic Oxicity in vitro: Micronucleus Assay: negative (mouse, male/female, oral). Toxicity to Reproduction/Fertility: Three generation study, oral, (rat male/female) NOAEL (parental): 200 ppm, NOAEL (F1) 200 ppm NOAEL (F2): 200 ppm. Reproductive effects have been shown in animal studies. Developmental Toxicity/Teratogenicity: rat, female, oral, gestation, daily, NOAEL (teratogenicity) 300 mg/kg. NOAEL (maternal) 75 mg/kg, no teratonic effects observed at doses tested. No fetotoxicity observed at doses tested.

Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.

Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7: This product and its components are not listed on the IARC, NTP, or OSHA carcinogens lists. There are no known cases of carcinogenesis from cellulose materials such as this component, and if used in a manner such that airborne concentrations are no greater than 10 mg/m³ (milligrams per cubic meter) or 30 mppcf (million particles per cubic foot) no long term health effects will occur.

Component CAS# 112926-00-8: LD50 (rat >5000 mg/kg, LD50 dermal (rat) >2000 mg/kg

Component CAS# 14807-96-6: Carcinogenic effects – this component may contain crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline Silica is also listed by the NTP as a known human carcinogen

Component CAS# 67762-90-7: LD50 (rat >1000 mg/kg, LD50 dermal (rabbit) >2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component Epoxy phenol novolac resin CAS# 28064-14-4: Freshwater Fish Toxicity - the acute LC50 is 1-10 mg/L, based on similar materials; Freshwater Invertebrates. Toxicity - the acute EC50 is 1-10 mg/L, based on similar materials. Material is not readily biodegradable.

Components Alkyl Phenol CAS# 84852-15-3 and Alkyl Phenol blocked Isocyanate NJTSRN(31765300002) - 6184P: Biodegradation: 0%, exposure time, 28 days – not readily biodegradable. Acute and Prolonged Toxicity to fish: LC0 > 10,000 mg/l (zebra fish, 96 hr). Toxicity to microorganisms: EC50 > 10,000 mg/l.

Components Alkyl Phenol CAS# 84852-15-3: Biodegradation: aerobic, 7%, exposure time, 28 days. Bioaccumulation: fathead minnow, exposure time 20 days, 271 BCF. Acute and Prolonged Toxicity to fish: LC50 = 0.31 mg/l (sheepshead minnow, 96 hr, LC50 0.135 mg/l fathead minnow, 96 hr. Toxicity to microorganisms: EC10 = 10-16 mg/l (Pseudomonas putida). Toxicity to aquatic plants: EC50: 1.3 mg/l, End point: Biomass (green algae, 72 hr)

Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitata (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50

Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7: These components are not known to have any adverse effect on the aquatic environment when properly disposed.

Component CAS# 112926-00-8: Ecotoxicity: EC50 (fish) .10000 mg/l (daphnia >10000 mg/l

Component CAS# 14807-96-6: There is no data that suggests that crystalline silica is toxic to birds, fish, invertebrates, microorganisms or plants.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD..

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

SECTION 14: Transport Information

DOT: Not Regulated

IMO/IMDG: Not Regulated

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component BISPHENOL F/EPICHLOROXYDRIN EPOXY RESIN CAS# 9003-36-5: Component is on the TSCA and Cadada DSL lists. Component is on the New Jersey and Pennsylvania right to know lists

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Component Epoxy phenol novolac resin CAS# 28064-14-4: U.S. Toxic Substances Control Act:

All components of this product are either listed on the U.S. Toxic Substances Control Act (TSCA) inventory of chemicals or are otherwise compliant with TSCA regulations. Immediate health hazard. The chemical identity of some or all components present is confidential business information (trade secret) and is being withheld as permitted by 29CFR1910.1200 (i). Component is on the Canadian Domestic Substances List (DSL) Canadian WHMIS Class: D2B

Components Alkyl Phenol CAS# 84852-15-3 and Alkyl Phenol blocked Isocyanate NJTSRN(31765300002) - 6184P: OSHA hazcom standard rating: Hazardous. Components on the following states Right to know substance list: Massachusetts, New Jersey and Pennsylvania. Components are on the TSCA list

Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List.

Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN).

Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7: Not considered a hazardous material TSCA: Not applicable

Component CAS# 112926-00-8: Is not classified as dangerous. National Chemical Inventory listings include – AICS, DSL, IECSC, EINECS, ENCS, KECI, NZLOC, PICCS, TSCA,

Component CAS# 14807-96-6 may contain Crystalline Silica (Silicon Dioxide) which is on the TSCA list. NTP list as a known human carcinogen, California proposition 65 list as a known carcinogen, Massachusetts Toxic Use Reduction Act list as toxic, Pennsylvania Worker and community right to know Act list as a hazardous substance.

Component CAS# 67762-90-7: Non hazardous component

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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NP928HV PART B
PRODUCT CODES: 928HV 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: 6/16/16

Chemical Name or Class: Polyamine mixture

SECTION 2: HAZARDS IDENTIFICATION**Hazard Overview**

GHS Classification: Reproductive toxicity category 2, Specific target organ toxicity following repeated exposure category 2, Skin corrosion/irritation category 1B, skin sensitizer category 1B, Serious eye damage category 1, Acute toxicity inhalation category 4, Germ cell Mutagenicity category 2, Acute dermal toxicity category 4, Acute hazard to aquatic environment category 2, Chronic hazards to aquatic environment category 2

GHS Label Elements and Precautionary Statements:

Label Elements: Health Hazard Exclamation Mark, Corrosion, Aquatic Toxicity

**Hazard Statements:**

Warning: Suspected of damaging the fertility or the unborn child.

Warning: May cause damage to organs (kidneys, liver, pancreas and spleen, and edema to the lungs) through inhalation and skin absorption through prolonged or repeated exposure.

Danger: Causes severe skin burns and eye damage

Warning: May cause an allergic skin reaction

Danger: Causes serious eye damage

Warning: Harmful if inhaled

Warning: Suspected of causing genetic defects.

Warning: Harmful in contact with skin.

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use

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

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

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

P271 Use only outdoors or in a well-ventilated area

P201 Obtain special instructions before use.

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

P273 Avoid release to the environment.

Response;

P314 Get medical advice/attention if you feel unwell

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P363 Wash contaminated clothing before reuse.

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

P310 Immediately call a POISON CENTER or doctor/physician.

P321 If skin irritation or burns develop, Call a doctor/physician .

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

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

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

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P361 + P364 take off immediately all contaminated clothing and wash it before reuse.
P310 If in eyes, immediately call a POISON CENTER or doctor/physician.
P312 If inhaled, Call a POISON CENTER or doctor/physician if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage

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: 3 FLAMMABILITY: 1 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

WILL CAUSE BURNS TO EYES. HIGH VAPOR CONCENTRATIONS CAN CAUSE SEVERE IRRITATION TO THE EYES.

SKIN:

WILL CAUSE BURNS TO THE SKIN

INGESTION:

LIQUID CAN CAUSE SEVERE DAMAGE TO MUCOUS MEMBRANES IF SWALLOWED.

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: yes

ADDITIONAL CARCINOGENICITY INFORMATION:

Some colors may contain carbon black - Explanation Of Carcinogenicity: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2B.

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>
*PHENOL	108-95-2	5PPM	5PPM	10PPM	8.0
M-XYLENE DIAMINE	1477-55-0	NONE	.1mg/m3	NONE	7-13
Benzene-1, 3-Dimethaneamine/Phenol/ Formaldehyde	57214-10-5	NONE	NONE	NONE	30-60
TRIS-2,4,6-dimethylaminomethylphenol	90-72-2	NONE	NONE	NONE	1-5
Bis(dimethylaminomethyl) phenol	71074-89-0	NONE	NONE	NONE	0.1-1
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	7-13
1,2-DIAMINOCYCLOHEXANE	694-83-7	NONE	NONE	NONE	10-30
ALIPHATIC AMINES	Unknown	NONE	NONE	NONE	1-5
TRIS-2,4,6-dimethylaminomethylphenol	90-72-2	NONE	NONE	NONE	1-5
*BISPHENOL A	80-05-7	NONE	NONE	NONE	1.0
*CARBON	1333-86-4	3.5PPM	3.4PPM	NONE	<1.0
Cellulose	9004-34-6	15mg/m3	10mg/m3	NONE	0.1-1
Kaolin	1332-58-7	15mg/m3	10mg/m3	NONE	0.1-1
Hydrophobic Silica	67762-90-7	6mg/m3	10mg/m3	NONE	5-10

SECTION 3 NOTES:

Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.

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

SECTION 4: FIRST AID MEASURES

EYES:

IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN 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 VICTIM TO FRESH AIR 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 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 ABSORBENT 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. 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 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: MEDIUM VISCOSITY – GRAY/BLACK OPAQUE COLORING

BOILING POINT OR RANGE: 200 TO 631F

VAPOR DENSITY (AIR = 1): ° F: N/A

SPECIFIC GRAVITY (H2O = 1): ° F: 1.1

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: NEGLIGIBLE

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:****For the Components. *PHENOL, M-XYLENE DIAMINE and Benzene-1, 3-Dimethaneamine/Phenol/ Formaldahyde:** Ingestion LD50 > 2200 mg/kg (rat), Inhalation LC50 (1h) > 20mg/l (rat), Skin LD50 > 1000 mg/kg (rabbit) all estimated. Eye Irritation – Severe eye irritant, Acute dermal irritation – severe skin irritant.**Component PHENOL:** Adsorption of phenolic solutions through the skin may be very rapid and can cause death. Lesser exposures can cause damage to the kidneys, liver, pancreas and spleen, and edema to the lungs. Chronic exposures can cause death from liver and kidney damage.**Component CAS# 90-72-2 and CAS# 71074-89-0:** Oral LD50 (rat) 1200 mg/kg; Dermal LD50 (rabbit) 1280 mg/kg; Inhalation LC50 (rat) > 0.5 mg/liter/1 hour; Severe irritant to eyes of a rabbit. Severe irritant to the skin of a rabbit. Corrosive to the skin of a rabbit.**Component Benzyl Alcohol:** Inhalation LC50 (4hr) >4178 mg/l (rat), Dermal LD50 2000 mg/kg (rabbit) Rats exposed to 800 mg/kg for thirteen weeks exhibited CNS depression and histopathological changes in the brain, thymus and skeletal muscles. The No observed Adverse effect level (NOAEL) was 400 mg/kg. No evidence of carcinogenicity was seen in two year study with rats and mice.**Component CAS# 694-83-7:** LD50 = 2,300 mg/kg (species rat) May cause sensitization by contact or inhalation**Component CAS# 111-40-0:** inhalation: LC50 (4hr) <0.3 mg/l (rat); Skin: LD50 >5000 mg/kg(rabbit) Ingestion: LD50 2960 mg/kg (rat). Severe Eye irritation, Moderate skin irritation, May cause sensitization by skin contact or inhalation.**Component CAS# 80-05-7:** Ingestion LD50 Oral (rat) = 3250 mg/kg. Irritation Data Skin (rabbit) 500 mg/24 hr (mild irritation effects. Irritation data eyes (rabbit) 0.25mg/24 hr (severe irritation effect). Skin contact or inhalation may cause sensitization. Component may impair fertility based on toxicology of similar products.**Component Carbon:** IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg**Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7:** This product and its components are not listed on the IARC, NTP, or OSHA carcinogens lists. There are no known cases of carcinogenesis from cellulose materials such as this component, and if used in a manner such that airborne concentrations are no greater than 10 mg/m³ (milligrams per cubic meter) or 30 mppcf (million particles per cubic foot) no long term health effects will occur.**Component CAS# 67762-90-7:** LD50 (rat >1000 mg/kg, LD50 dermal (rabbit) >2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

No data for the product itself.**Component data:****Component PHENOL:** Toxicity to Daphnia EC50 (48h) 4.2 mg/l; EC50 (48h) 5.55 mg/l; EC50 (48h) 6.6 mg/l. This component has a low bioaccumulation potential.**Component CAS# 90-72-2 and CAS# 71074-89-0:** Toxicity: LC50 fish 447.8 mg/l (96 hr). LC50 Crust 28.2 mg/l (48 hr). EC50 alga 34.8 mg/l (96 hr)**Component Benzyl Alcohol:** EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD₂ 62. Slightly or not bioaccumulative. Toxicity to fish: LC50 (96 hr) 10 mg/l Bluegill sunfish (Lepomis macrochirus), LC50 (96hr) 460 ml/l Fathead minnow (Pimephales promelas), Toxicity to Algae: IC50 (72hr) 700 mg/l**Component CAS# 80-05-7:** Acute Ecotoxicity tests LC50 (fathead minnow) 96 hr = 4.6 mg/l. LC50 (daphnia magna) 48 hr = 3.9 mg/l. LC50 (algae) 96 hr = 2.73 mg/l.**Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7:** These components are not known to have any adverse effect on the aquatic environment when properly disposed.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:**DISPOSE OF MATERIAL AS A HAZARDOUS WASTE ACCORDING TO FEDERAL, STATE, AND LOCAL REGULATIONS.**

SECTION 14: Transport Information

DOT: UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS PHENOL SOLUTIONS, M-**XYLENE DIAMINE), 8, PG III**

SAFETY DATA SHEET

PRODUCT CODE: 928HV

IMO/MDG: UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS PHENOL SOLUTIONS, M- XYLENE DIAMINE), 8, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

For the Components. *PHENOL, M-XYLENE DIAMINE and Benzene-1, 3-Dimethanamine/Phenol/ Formaldehyde: Components are on the TSCA list as well as EINECS, DSL, AICS, ENCS, ECK, SEPA, and PICCS inventory lists.

Component PHENOL: Is a SARA Title III Section 313 Component above the 'de minimus' level.

Component CAS# 90-72-2 and 71074-89-0 EEC symbol – Harmful, harmful if swallowed (R22) Irritating to eyes and skin (R36/38).

Component is on the Canada DSL, TSCA, EINECS, AICS, ENCS, ECL, SEPA, PICCS lists

Component Benzyl Alcohol: E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada, EINECS, AICS, ENCS, ECL, SEPA, lists or inventory.

Component CAS# 694-83-7: Component is on the TSCA list and Canada DSL, EINECS, AICS, ENCS, ECL, SEPA, lists or inventory.

Component CAS# 694-83-7, Benzyl Alcohol CAS# 100-51-6, Aliphatic amines: WHMIS Trade Secret Registration Number 5096 grant date 5/4/2004..

Component Aliphatic Amines: on TSCA, EINECS, AICS, ENCS, ECL, SEPA lists or inventory.

Component CAS# 111-40-0: on TSCS List, OSHA hazard class – Irritant. Regulatory List: On TSCA, on EINECS, DSL, AICS, ENCS, ECL, SEPA, PICCS.

Component CAS# 80-05-7: This component is subject to SARA section 313 reporting requirements. Component is on TSCA EINECS, AICS, ENCS, ECL, SEPA, PICCS and Canada DSL lists.

Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada

Component(s) Cellulose CAS# 9004-34-6 and Kaolin CAS# 1332-58-7: Not considered a hazardous material TSCA: Not applicable

Component CAS# 67762-90-7: Non hazardous component

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