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**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

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PRODUCT NAME: 209 PART A  
PRODUCT CODES: 209A

MANUFACTURER/DISTRIBUTOR: Epoxy Systems, Inc.  
STREET ADDRESS: 20774 W Pennsylvania Ave.  
CITY, STATE, ZIP: Dunnellon, FL 34431

INFORMATION PHONE: 352-489-1666  
EMERGENCY PHONE: PERS 800-633-8253 International PERS: +1801 6290667  
FAX PHONE: 352-489-1625

PREPARED BY: Norm Lambert

DATE REVISED: 10/06/15  
Chemical Name or Class: Epoxy mixture

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**SECTION 2: HAZARDS IDENTIFICATION**

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**Hazard Overview**

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

**GHS Label Elements and Precautionary Statements:**

**Label Elements:** Exclamation Mark, Aquatic Toxicity

**Hazard Statements:**

Warning: Causes serious eye irritation.

Warning: Causes skin irritation

Warning: May cause an allergic skin reaction

Toxic 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.

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.

P391 Collect spillage.

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

**HMIS HAZARD CLASSIFICATION**

HEALTH: 1 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.

**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 CONCENTRATIONS OF VAPOR.

EYES: INJURY IS UNLIKELY BUT STAIN FOR EVIDENCE OF CORNEAL INJURY.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY INGREDIENTS OF THIS PRODUCT ARE REGULATED AS CARCINOGENS.

**CARCINOGENICITY**

OSHA: NO NTP: NO IARC: NO

ADDITIONAL CARCINOGENICITY INFORMATION:

N/A

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## 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>
MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A	25068-38-6	NONE	NONE	NONE	60-100
ALKYL GLYCIDYL ETHER	68609-97-2	NONE	NONE	NONE	10-30

### SECTION 3 NOTES:

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

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

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## SECTION 4: FIRST AID MEASURES

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### 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 IMMEDIATELY CONSULT A PHYSICIAN.

### INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

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## SECTION 5: FIRE-FIGHTING MEASURES

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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, CO<sub>2</sub>, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER CONFINED FIRE 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.

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## SECTION 6: RELEASE MEASURES

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

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.

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## SECTION 7: HANDLING AND STORAGE

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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.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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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.

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**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 OCCPATONAL EXPOSURE LIMIT VALUES.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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APPEARANCE AND ODOR: LOW VISCOSITY LIQUID – AMBER CLEAR or COLORS

BOILING POINT OR RANGE: 200+ F

VAPOR DENSITY (AIR = 1): Not available

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 1.1

EVAPORATION RATE: not available

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

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**SECTION 10: STABILITY AND REACTIVITY**

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**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:**

CO<sub>2</sub>, ALDEHYDES, ACIDS. REACTION WITH SOME CURING AGENTS CAN GENERATE LARGE AMOUNTS OF HEAT.

**HAZARDOUS POLYMERIZATION:**

WILL NOT OCCUR.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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No data for the product itself.

**Component data:**

**Component CAS# 25068-38-6:** Moderate sensitizer, slight eye irritant, moderate skin irritant, Oral LD50 >5000 mg/kg (rat), Dermal LD50 >6000 mg/kg (rabbit)

**Component CAS# 68609-97-2:** possible sensitizer, eye and skin irritant, Oral LD50 >10000 mg/kg (rat), Inhalation LD50 – no microscopic changes

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**SECTION 12: ECOLOGICAL INFORMATION**

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No data for the product itself.

**Component data:**

**Component CAS# 25068-38-6:** Biodegradability (Modified Sturm Method) 12%, Fish toxicity: Rainbow trout (96hr) LC50 1.5mg/l, Zebra Fish (96hr) LC50 2.4 mg/l. Invertebrate Toxicity: Daphnia Toxicity (24hr) EC 50 3.6 mg/l

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**SECTION 13: WASTE DISPOSAL**

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**WASTE DISPOSAL METHOD:**

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

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## SECTION 14: Transport Information

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DOT: Not Regulated

IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS Bisphenol A Diglycidyl Ether Polymer) , 9, PGIII, Marine Pollutant

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## SECTION 15: REGULATORY INFORMATION

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No data for the product itself.

**Component data:**

**Component CAS# 25068-38-6:** Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, WHMIS class D2B; Is on the New Jersey Right to Know list; is on the PA Right to Know List;

**Component CAS# 68609-97-2:** Considered a hazardous chemical; is on the TSCA list; is on the DSL Canada, Is on the New Jersey Right to Know list; is on the PA Right to Know List.

EPA SARA Title III Section 313 components above the de minimus level: none

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## SECTION 16: OTHER INFORMATION

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**DISCLAIMER:** The information Contained herein is based on the data available and is believed to be accurate, However, Epoxy Systems, Inc. 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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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: 209 PART B  
PRODUCT CODES: 209B

MANUFACTURER/DISTRIBUTOR: Epoxy Systems, Inc.  
STREET ADDRESS: 20774 W Pennsylvania Ave.  
CITY, STATE, ZIP: Dunnellon, FL 34431

INFORMATION PHONE: 352-489-1666  
EMERGENCY PHONE: PERS 800-633-8253 International PERS: +1801 6290667  
FAX PHONE: 352-489-1625

PREPARED BY: Norm Lambert

DATE REVISED: 10/06/15  
Chemical Name or Class: Polyamine/coal tar mixture

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## SECTION 2: HAZARDS IDENTIFICATION

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### Hazard Overview

GHS Classification: Acute inhalation category 4, Acute oral toxicity category 4, Acute dermal toxicity category 4, Skin corrosion category 1B, Serious eye damage category 1, Skin sensitization category 1, Specific target organ toxicity – single exposure category 3, Carcinogen category 1B, Germ cell mutagenicity category 2, Toxic to reproduction category 1B, Acute hazard to aquatic environment category 2, Aquatic hazard with long lasting effects category 2

### GHS Label Elements and Precautionary Statements:

**Label Elements:** Health hazard, Exclamation Mark, Corrosion, Aquatic Toxicity

### Hazard Statements:

Warning: Harmful if inhaled.  
Warning: Harmful if swallowed  
Warning: Harmful in contact with skin  
Danger: Causes severe skin burns and eye damage  
Warning: May cause an allergic skin reaction  
Danger: Causes serious eye damage  
Warning: May cause respiratory irritation.  
Danger: May cause cancer  
Warning: Suspected of causing genetic defects.  
Danger: May damage fertility of unborn child  
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.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves and clothing to prevent skin contact.  
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;  
P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.  
P330 Rinse mouth.  
P302 + P352 IF ON SKIN: wash with plenty of soap and water  
P312 Call a POISON CENTER or doctor/physician if you feel unwell  
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.  
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.  
P310 If in eyes, immediately call a POISON CENTER or doctor/physician.  
P302 + P352 IF ON SKIN: wash with plenty of soap and water.  
P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

# SAFETY DATA SHEET

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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.

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

P391 Collect spillage.

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.

Other Non-classifiable potential hazards

Acute inhalation toxicity category 2 (This product contains a component that is toxic by inhalation and can be fatal if inhaled when aerosolized or sprayed. If the product is not being sprayed or aerosolized, the inhalation toxicity is not applicable. The product is not intended to be sprayed or aerosolized,

## HMIS HAZARD CLASSIFICATION

HEALTH: 3 FLAMMIBILITY: 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. IF NOT WASHED OFF THE SKIN AND WHEN ACCENTUATED BY SUNLIGHT BURNS CAN RESULT.

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.

OVEREXPOSURE MAY RESULT IN ACUTE TOXIC EFFECTS, RESPIRATORY DIFFICULTY, CONVULSIONS, AND POSSIBLE CARDIOVASCULAR COLLAPSE.

HEALTH HAZARDS (ACUTE AND CHRONIC):

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

**Coal Tar Pitch Emergency Overview:** (Danger This product is carcinogenic to humans. Repeated or prolonged contact with skin may cause dermatitis and hyperpigmentation of skin. Avoid breathing dust/fume/gas/mist/vapours and sprays. This product is irritating to the eyes, the skin and the respiratory tract. Exposure to sun may enhance the irritating effect of coal tar pitch on skin and eyes and lead to burns. High vapor concentrations may cause dizziness. Use in well-ventilated areas. Avoid prolonged and/or repeated contact including vapors. If appropriate, respiratory protection and other personal protective equipment should be used. ).

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

## CARCINOGENICITY

OSHA: YES NTP: YES IARC: YES

ADDITIONAL CARCINOGENICITY INFORMATION:

Coal Tar: FREQUENT, PROLONGED OR OCCASIONAL BUT INTENSIVE CONTACT WITH THE SKIN OVER A MANY YEAR PERIOD.

IN THE ABSENCE OF RECOMMENDED HYGIENE PRACTICES, MAY LEAD TO SKIN PIGMENTATION, BENIGN SKIN GROWTHS AND IN SOME CASES MAY RESULT IN SKIN CANCER. Coal tar pitch is an IARC Group 1 Human carcinogen, an ACGIH A1 Known human carcinogen. Carbon is an IARC GROUP 2B 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>
DIETHYLENTRIAMINE	111-40-0	1ppm	1ppm	NONE	3-7
*BISPHENOL A	80-05-7	NONE	NONE	NONE	1%
NONYL PHENOL	84852-15-3	NONE	NONE	NONE	10-30
N-AMINOETHYLPIPERAZINE	140-31-8	NONE	NONE	NONE	10-30
*CARBON	1333-86-4	3.5PPM	3.4PPM	NONE	0.1-1
Siloxanes and silicones, di-me reactions products with silica (non-hazardous)	67762-90-7	none	none	none	0.1-1
siloxanes and silicones, di-methyl (non-hazardous)	63148-62-9	none	none	none	0.1-1
*PHENOL	108-95-2	5 PPM	5 PPM	10 PPM	0.1-1
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	0.1-1
ISOPHORONE DIAMINE	2855-13-2	NONE	NONE	NONE	0.1-1
*COAL TAR PITCH (Crude Coal Tar) (also see section 15 for a chemical list of components contained in the Coal Tar Pitch)	65996-93-2	.2MG/M3	.2MG/M3	NONE	64.5%

\*\*\*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.\*\*\*  
REGULATORY STANDARD – NIOSH CRITERIA DOCUMENT, COAL TAR PITCH PRODUCTS. USEPA – 40 CFR 112. (CAS# 65996-93-2 represents the benzene soluble fraction for coal tar pitch volatiles.

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

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## SECTION 4: FIRST AID MEASURES

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**EYES:**

IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF 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.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

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## SECTION 5: FIRE-FIGHTING MEASURES

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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, CO<sub>2</sub>, 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:

WATER/FOG IS RECOMMENDED FOR CONTROL OF UNCONFINED FIRE, BUT WATER MAY CAUSE FROTHING OR ERUPTION IN CLOSED TANK.

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## 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 ABSORBENT AND PLACE IN DISPOSAL CONTAINERS.

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## 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 SKIN AREAS THOROUGHLY (DO NOT USE SOLVENTS TO WASH SKIN) 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.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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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 OCCPATONAL EXPOSURE LIMIT VALUES.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE AND ODOR: BLACK LIQUID WITH AMINE ODOR  
BOILING POINT OR RANGE: 560 TO 631 f  
VAPOR DENSITY (AIR = 1): N/A  
SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 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

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## SECTION 10: STABILITY AND REACTIVITY

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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 WATER WHEN IN CONFINED AREA, OXIDIZING AGENTS MINERAL ACIDS AND EPOXY RESINS IN UNCONTROLLED AMOUNTS.  
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:  
CO, CO<sub>2</sub>, NOX.  
HAZARDOUS POLYMERIZATION:  
WILL NOT OCCUR.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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No data for the product itself.

**Component data:**

**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 CAS# 140-31-8:** Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, skin: 5 mg/24H Severe; Oral, rat: LD50 = 2140 uL/kg; Skin, rabbit: LD50 = 880 uL/kg; Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65. May cause Sensitization by skin contact.

**Component Nonyl Phenol:** Median Lethal Dose Oral: LD50 0.58g/kg (rat) moderately toxic. Dermal LD50 2.14g/kg (rabbit) slightly toxic. Skin Draize Test, rabbit,: 500 mg/m<sup>3</sup> 24hr – corrosive. Eyes Draize test rabbit, 57.00/110 – extremely irritating. Component is a possible risk of impaired fertility.

**Component Carbon:** IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg

**Component(s): \*PHENOL CAS# 108-95-2, Isophorone diamine CAS# 2855-13-2, benzyl alcohol cas# 100-51-6:** Ingestion LD50 >1,752 mg.kg (rat). Inhalation ISO TC58 (1 hr): oppm Method Estimated. Skin LD50 > 2000 mg/kg (rabbit) method estimated. Severe Eye irritation, severe skin irritation. Components did not cause sensitization in laboratory animals. No evidence of carcinogenicity was seen in a two year study with rats and mice. 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 of the lungs. Chronic exposures can cause death from liver and kidney damage.

**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# 2855-13-2:** Oral LD50 rat 1030 mg/kg. Skin irritation – Corrosive sucategory 1C where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days. Eye irritation – Risk of serious damage to eyes. Product Sensitization (Magnusson- Kigman test) guinea pig: may cause sensitization by skin contact. Product Teratogenicity oral rat NOEL (no observed effect level) 250 mg/kg

**COMPONENT COAL TAR PITCH CAS# 65996-93-2:** Acute Toxicity LD50 (rat) >5000 mg/kg. Dermal: This component is positive for carcinoma and papillomas. Inhalation: Tumors (lungs, bladder, kidneys, other).

The following toxicity data has been determined for Crude Coal Tar by using the information available for its components applied to the guidance on the preparation of an SDS under the requirements of the GHS:

Notes:

- a. No LC50 or LD50 has been established for Crude Coal Tar (as Tar, Coal high temp) as a mixture:
  - Causes respiratory tract irritation
- b. The following Skin Irritation information was found for Crude Coal Tar (as Tar, Coal high temp):
  - Irritating
- c. The following Eye Irritation information was found for Crude Coal Tar (as Tar, Coal high temp):
  - Causes eye irritation
- d. The following Skin Sensitization information was found for Crude Coal Tar (as Tar, Coal high temp):
  - Photosensitizing
- e. No Germ Cell Mutagenicity data available for Crude Coal Tar (as Tar, Coal high temp) as a mixture.
- f. Carcinogenicity: IARC and NTP list Crude Coal Tar (as Tar, Coal high temp) as a category 1A carcinogen. Classified by IARC and the European Commission as a Known Human Carcinogen.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

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## SECTION 12: ECOLOGICAL INFORMATION

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**No data for the product itself.**

**Component data:**

**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 Nonyl Phenol:** Ecotoxicity: Daphnia EC50: 0.14-0.44 mg/l, 48 hr. Component is not readily biodegradable, log Pow: 3-4. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.. Aquatic Toxicity LC50 96 hr, toxicity rating is <0.10 ppm – extremely toxic

**Component Benzyl Alcohol:** EC50 (48hr) 400 mg/l Daphnia Magna, EC50 (72hr) 2600 mg/l Algae, Biodegradation BOD<sub>2</sub> 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 Phenol CAS# 108-95-2:** EC50 (48 hours) 4.2 mg/l (species Daphnia), EC50 (48 hours) 5.55 mg/l (species Daphnia), EC50 (48 hours) 6.6 mg/l (species Daphnia), (low bioaccumulation potential)

**Component CAS# 2855-13-2:** Biodegradability 42% and is not readily biodegradable. Bioaccumulation: - no significant accumulation of the substance in organisms is to be expected. Mobility: The soil mobility of the substance is only minimally affected by adsorption to soil components. Toxicity to fish: LC50 *Lauciscus idus* 110 mg/l (96hr). Toxicity to Daphnia NOEC 3 mg/l (504hr). EC50 Daphnia magna 23 mg/l (48 hr). ErC50 *scenedesmus subspicatus* 50 mg/l (72 hr). NOEC *scenedesmus subspicatus* 1.5 mg/l (72 hr). Toxicity to bacteria: EC10 *Pseudomonas putida* 1120 mg/l (18 hr).

**COMPONENT COAL TAR PITCH CAS# 65996-93-2:** Ecotoxicity: NOEC >1 g/l (Daphnia magna). NOEC > 1 g/l (*Chlorella* sp). Persistence and Degradability: Evidence exists for biodegradation processes. Bioaccumulative potential: The product has potential for bioaccumulation. Individual Coal tar components of the product have been found to be absorbed by plants from soil.

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## SECTION 13: WASTE DISPOSAL

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**WASTE DISPOSAL METHOD:**

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

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## SECTION 14: Transport Information

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**DOT:** UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS DIETHYLENETRIAMINE, PHENOL SOLUTION, COAL TAR, NONYL PHENOL), 8, PG III, MARINE POLLUTANT

**IMO/IMDG:** UN1760, CORROSIVE LIQUID N.O.S. (CONTAINS DIETHYLENETRIAMINE, PHENOL SOLUTION, COAL TAR, NONYL PHENOL), 8, PG III, MARINE POLLUTANT

## SECTION 15: REGULATORY INFORMATION

No data for the product itself.

**Component data:**

**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 CAS# 140-31-8:** Component is listed on the TSCA inventory. Component can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts. Component contains no California Prop 65 Significant Risk Level: and none of the chemicals in this product are listed. Component is list on the Canadian DSL list, EINECS, AICS, ENCS, ECL, SEPA, PICCS lists.

**Component Nonyl Phenol:** This component is listed on TSCA, EINECS, ACIS, MITI and Canada DSL lists.

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

**Component Siloxanes and silicones, di-me reactions products with silica:** Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

**Component siloxanes and silicones, di-methyl:** Included on TSCA, EINECS, MITI, ACOIN, and Canadian DSL inventory or lists.

**Component Benzyl Alcohol:** E20/22 Harmful by inhalation and if swallowed. On TSCA list, on DSL Canada

**Component(s): \*PHENOL CAS# 108-95-2:** Component is on the TSCa Canada DSL, EINECS, AICS, ECL, and PICCS lists. Component Phenol CAS# 108-95-2: EPA Sarah Title III (40CFR 372), Components above the de minimus level.

**Component CAS# 2855-13-2:** Acute health hazard. Ingredients on TSCA. International Chemical status listed/registered – EINECS/ELINCS, DSL, AICS, MITI, TCOL, PICCS, China, New Zealand.

**COMPONENT COAL TAR PITCH CAS# 65996-93-2: TSCA:** All components listed or polymer exempt.

This product and/ or its constituents are subject to the following regulations:

OSHA Regulations: OSHA has not established a substance-specific standard for occupational exposure to Crude Coal Tar. However, exposures are regulated under OSHA Air Contaminants Standard (29 CFR1910.1000 Table Z-1) as Coal Tar Pitch Volatiles (CTPV).

**Section 313 Supplier Notification:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372 – AS Marked. The remaining chemicals are Designated hazardous chemicals with reportable quantities.:

CAS #	Chemical Name	Percent by Weight
218-01-9 (40CFR 302.4)	Chrysene,	0.5 – 0.8
56-55-3 (40CFR 302.4)	1,2-Benzanthracene	0.5 – 1.0
50-32-8 (40CFR 302.4)	Benzo(a)pyrene	0.4 – 0.7
205-99-2 (40CFR 302.4)	Benzo(b)Fluoranthene	0.3 – 0.7
132-64-9 (40CFR 302.4)	Dibenzofuran	0.4 – 0.7
83-32-9 (40CFR 302.4)	Acenaphthene	0.4 – 0.8
120-12-7 (SARA 313)	Anthracene	0.7 – 1.0
206-44-0 (40CFR 302.4)	Fluoranthene	1.5 – 2.5
85-01-8 (SARA 313)	Phenanthrene	1 - 3
91-20-3 (SARA 313)	Naphthalene	0.8 – 1.5
53-70-3 (40CFR 302.4)	Dibenz (a,h) anthracene	0.07 – 0.11
193-39-5 (40CFR 302.4)	Indeno (1,2,3-cd) pyrene	0.5 – 1.0
92-52-4 (40CFR 302.4)	Biphenyl	0 – 0.2
Category No. N590	Polycyclic aromatic compounds (PACs)	4.8 – 8.5
129.00.0 (SARA 302) (40CFR 355)	Pyrene	1 – 2

**State Regulations:** The product, **Crude Coal Tar** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

- **Pennsylvania Right to Know: Crude Coal Tar** as a whole is not listed. However, individual components of the product are listed.
- **California Prop. 65: Crude Coal Tar** as a whole is not listed. However, individual components of the product are listed.
- **New Jersey: Crude Coal Tar** as a whole is not listed. However, individual components of the product are listed.
- **Minnesota: Crude Coal Tar** as a whole is not listed. However, individual components of the product are listed.
- **Massachusetts: Crude Coal Tar** as a whole is not listed. However, individual components of the product are listed.

**Other regulations:** **Crude Coal Tar** as a whole may not be listed in other regulations. However, individual components may be listed, check appropriate regulations for further regulatory compliance.

**WHMIS Classification (Canadian): Crude Coal Tar** (listed as Tar Decanter Sludge) is listed as a **D2A**.

## SECTION 16: OTHER INFORMATION

**DISCLAIMER:** The information Contained herein is based on the data available and is believed to be accurate, However, However, Epoxy Systems, Inc. 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