

TECHNICAL DATA (Epoxy Oil Stop Coating)

PRODUCT DESCRIPTION: 201P is a two component solvent based epoxy coating that exhibits excellent characteristics for coating over petroleum based oil contaminated concrete. This product allows excellent substrate penetration which results in excellent adhesion and is an ideal primer for the oil contaminated concrete substrate.

RECOMMENDED FOR: Recommended for petroleum oil contaminated substrates. However, this product is not intended for use over vegetable oil, animal fat or synthetic oil contaminated concrete. This product can withstand exposure to many common solvents and chemicals.

SOLIDS BY WEIGHT: Mixed= 71.5% (+,-2%)

SOLIDS BY VOLUME: Mixed= 63% (+,- 2%)

VOLATILE ORGANIC CONTENT:

Part A= 2.5 pounds per gallon;

Part B= 2.75 pounds per gallon

Mixed VOC < 330 g/L

STANDARD COLORS: Black only

RECOMMENDED FILM THICKNESS:

5-8 mils per coat (wet thickness)

3-5 mils dry

COVERAGE PER GALLON:

200-320 square feet @ 5-8 mils wet thickness

PACKAGING INFORMATION

2 gallon and 10 gallon kits (volumes approx.),

2 gal kit= 1 gallon part A (10.05#/gal) and 1 gallon

part B (8.6#/gal) (weights approximate)

MIX RATIO:

1 part A to 1 part B by volume

SHELF LIFE:

1 year

ABRASION RESISTANCE:

Taber abraser CS-17 calibrase wheel with 1000

gram total load and 500 cycles = 37.0 mg loss

FLEXIBILITY:

No cracks on a 1/8" mandrel

FINISH CHARACTERISTICS:

Satin gloss (40-60 at 60 degrees @ glossmeter)

VISCOSITY:

Mixed = 150-300 cps (typical)

DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

IMPACT RESISTANCE:

Gardner Impact, direct= 50 in. lb (passed)

PRIMER:

None required

TOPCOAT:

Optional- We recommend one (1) coat of NP143/144 followed by two (2) coats of NP321 in

the same color as the NP143/144. Many other

products are suitable as topcoats. Consult your representative.

CURE SCHEDULE (70 Degrees F)	
Pot Life (2 Gallon Volume)	2-4 hours
Tack Free (Dry to Touch)	2-4 hours
Recoat or Topcoat	4-8 hours
Light Foot Traffic	16-24 hours
Full Cure (Heavy Traffic)	2-7 days
Application Temperature: 55-90 degrees F	

CHEMICAL RESISTANCE	
Acetic Acid 5%	A
Xylene	B
Toluene	B
1,1,1 trichloroethane	A
MEK	A
Gasoline	B
10% Sodium Hydroxide	E
50% Sodium Hydroxide	D
10% Sulfuric	C
10% Hydrochloric acid	C
20% Nitric Acid	A
Ethylene Glycol	C
Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.	

LIMITATIONS:

For best results use a high quality 3/8" nap roller. Slab on grade requires moisture barrier.

Substrate temperature must be 5°F above dew point

All new concrete must be cured for at least 30 days prior to application.

Color may vary slightly from batch to batch.

Always apply a test patch of the entire system prior to using to determine the suitability and adhesion characteristics.

See reverse side for application instructions.

Physical properties are typical values and not specifications.

See reverse side for limitations of our liability and warranty.

MIXING AND APPLICATION INSTRUCTIONS: 201P Epoxy Oil Stop Coating

PRODUCT STORAGE: Store product at normal room temperature. Continuous storage should be between 60 and 90 degree F.

SURFACE PREPARATION: Surface preparation will vary according to the type of complete system to be applied. Make certain that the substrate where the 203P is to be applied is clean, sound and free of all laitance, dirt, dust, oil, grease, or foreign contaminants. Make certain that the floor is completely dry before application. It is often undesirable to shot blast a petroleum contaminated concrete surface unless the applicator is prepared to steam and solvent clean the area. Shot blasting tends to open oil filled pores that will be detrimental to the application process. The method of cleaning an oil soaked floor is best determined at the job location. However, solvent cleaning, steam cleaning, and water emulsion cleaners can all be considered. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

PRODUCT MIXING: This product has a one to one mix ratio by volume- merely mix equal volumes such as 1 gallon of part A to 1 gallon of part B. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until streak free. Improper mixing may result in product failure.

PRODUCT APPLICATION: We recommend one coat of 203P followed by one coat of EP301 or EP600 and then two additional coats of 401U in clear/color as the EP301/EP600. Due to the vastly varying contamination parameters, it is recommended that the applicator both check the adhesion of this product to the substrate as well as a thorough evaluation of the proposed intermediate and topcoat selections. Petroleum based oils have a tendency to migrate upward through newly placed coatings and could cause disbonding if all preceding coats are not inspected prior to topcoating. Clean all previous coatings as necessary. THIS COATING SHOULD NOT BE USED UNTIL A REPRESENTATIVE SAMPLE PATCH HAS BEEN PLACED AND THOROUGHLY EVALUATED FOR SUITABILITY. Make certain that the floor temperature and air temperature is between 55 and 90 degrees Fahrenheit. Preferably, the relative humidity should be below 90%. This product should be applied by roller or brush at five to eight mil thickness when wet. Too thick of an application may result in product failure.

RECOAT OR TOPCOATING: After applying the 401U and the coating has cured sufficiently, the applicator can then proceed with the EP301/EP600 application. Allow sufficient time between all subsequent coatings; and remember, as temperatures become lower all products will require additional time to cure. Read the individual technical data sheets for each product before proceeding. If different topcoats are desired, contact your representative for application details before proceeding.

CLEANUP: Use xylol

FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

RESTRICTIONS: Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

*We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may **CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.***

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SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Oil Stop Primer - PART A
PRODUCT CODES: 201P

MANUFACTURER: EpoxyPro Coat, LLC
STREET ADDRESS: 1406 Mackinaw Ave.
CITY, STATE, ZIP: Cheboygan, MI 49721
INFORMATION CONTACT: John R. Davis
TOLL FREE: 877.703.7699 **EMAIL:** info@EpoxyPro.com **FAX:** 888.581.0444

EMERGENCY PHONE: Chemtrec 800-424-9300
FAX: 732.494.1747

DATE REVISED: 3/10/2017

Chemical Name or Class: Epoxy/Solvent mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Flammable liquid category 3, Specific target organ toxicity following repeated exposure category 2, Specific target organ toxicity – single exposure category 3, Aspiration hazard category 2, Acute dermal toxicity category 4, Skin corrosion/irritation category 2, skin sensitizer category 1B, Serious eye irritation category 2, Acute toxicity inhalation category 4, Chronic hazard to aquatic environment category 2

GHS Label Elements and Precautionary Statements:

Label Elements: Flame, Health hazard, Exclamation Mark

Hazard Statements:

Warning: Flammable liquid and vapor.
 Warning: May cause damage to organs (auditory system) through prolonged or repeated exposure
 Warning: may cause drowsiness or dizziness
 Warning: May be harmful if swallowed and enters airways
 Warning: Harmful in contact with skin
 Warning: Causes skin irritation
 Warning: May cause an allergic skin reaction
 Warning: Causes serious eye irritation.
 Warning: Harmful if inhaled
 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P102 Keep out of reach of children.
 P103 Read label before use
 P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray
 P264 Wash skin thoroughly after handling.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P271 Use only outdoors or in a well-ventilated area

Response

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
 P370 + P378 In case of fire: Use FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL for extinction.
 P314 Get medical advice/attention if you feel unwell
 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.
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P331 Do NOT induce vomiting.
 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.
 P302 + P352 IF ON SKIN: wash with plenty of soap and water.
 P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
 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.

SAFETY DATA SHEET

PRODUCT CODE: 201 P A

P273 Avoid release to the environment

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool

P405 Store locked up.

P233 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

Carcinogenicity category 2, (Ethyl benzene at less than 17% in a study done by the NTP was determined to not be carcinogenic.)

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, OR BLURRED VISION

SKIN:

MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS.

INGESTION:

DO NOT INDUCE VOMITING, KEEP PERSON WARM AND CONSULT A PHYSICIAN IMMEDIATELY.

INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, HEADACHE AND POSSIBLE UNCONSCIOUSNESS

HEALTH HAZARDS (ACUTE AND CHRONIC):

EPOXY RESINS CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITIES, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE OR EVEN EYE DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS.

CARCINOGENICITY

OSHA: NO NTP: yes IARC: yes

ADDITIONAL CARCINOGENICITY INFORMATION:

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. Product may contain ethyl benzene as a component of xylene (IARC 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>
Reaction Products of Epichlorohydrin-Bisphenol A	25068-38-6	NONE	NONE	NONE	40-70
*BUTANOL NORMAL	71-36-3	50PPM	50PPM	NONE	5
Talc	14807-96-6	20mg/m3	20mg/m3	20mg/m3	10-30
*crystalline silica (as a component of talc)	14808-60-7	10mg/m3	.1mg/m3	.1mg/m3	<1.0
*Xylene	1330-20-7	100PPM	100PPM	150PPM	20
*ethyl benzene (as a component of xylene)	100-41-4	100ppm	100ppm	125ppm	0-5.0
*toluene (as a component of xylene)	108-88-3	200ppm	20ppm	150ppm	0-0.2

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372. (ACGIH STEL=150PPM FOR XYLENE). (BUTANOL: OSHA CEILING =50PPM, TWA-SKIN=50PPM, ACGIH TWA SKIN=50PPM). (ETHYL BENZENE ACGIH STEL= 125PPM).

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

SAFETY DATA SHEET

PRODUCT CODE: 201 P A

FLAMMABLE LIMITS IN AIR, **UPPER: 11.2%**
(% by volume) **LOWER: 1.4%**

FLASH POINT: 88+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL

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. PRESENCE OF SOLVENTS IN PRODUCT MAY REQUIRE GROUNDING.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

IF FIRE OCCURS, SOLVENTS MAY PRODUCE EXCESSIVE PRESSURE. SEALED DRUMS MAY RUPTURE AND IGNITE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND IGNITE BY ANY SOURCE OF IGNITION. NEVER USE A CUTTING OR WELDING TORCH NEAR CONTAINERS (EVEN EMPTY). ALL 5 GALLON AND LARGER CONTAINERS SHOULD BE GROUNDED BEFORE TRANSFERRING MATERIAL.

SECTION 6: RELEASE MEASURES

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.

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. WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILLATION IS NOT SUFFICIENT TO CONTROL VAPORS.

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. ENGINEERING OR ADMINISTRATIVE MEASURES SHOULD BE TAKEN TO REDUCE THE RISK AND EXPOSURE.

VENTILATION:

PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TOXIC LEVEL VALUES.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID - AMBER CLEAR - SOLVENT ODOR

BOILING POINT OR RANGE: 200 TO 279F

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

SAFETY DATA SHEET

PRODUCT CODE: 201 P 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 AS WELL AS ALL SOURCES OF IGNITION SUCH AS SPARKS, HEATERS, AND STATIC DISCHARGES ETC.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID AMINE CURING AGENTS IN UNCONTROLLED AMOUNTS AND STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

MAY FORM TOXIC CHEMICALS, CARBON DIOXIDE, CARBON MONOXIDE AND VARIOUS HYDROCARBONS ETC

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

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 Butanol CAS# 71-36-3: Acute Oral Toxicity LD50 = 790 mg/kg (rat) 4hr estimated. Acute Dermal Toxicity LD50 = 3400 mg/kg (rabbit) 4hr estimated. Acute toxicity of the Vapor LC50 = 8000 (rat) 4hr estimated

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 Xylene: Inhalation LC50 26800ppm, Skin LD50 2000 mg/kg, Ingestion LD50 4.3 g/kg. Exposure may effect skin, eye, liver, kidney, nervous system, respiratory system and lungs. High concentrations may lead to nervous system effects. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Xylene may contain ethyl benzene, and toluene. Ethyl benzene has shown limited evidence of a carcinogenic effect.

COMPONENT Ethyl Benzene: Acute Oral toxicity LD50: ca. 3500 mg/kg (rat); Acute inhalation LC50: 17.2 mg/l 4h (rat); Acute Dermal Toxicity: 17,800 mg/kg (rabbit); Skin Irritation rabbit Draize exposure time 24h – slightly irritating. Eye Irritation rabbit Draize – severely irritating. Sensitization dermal (human patch test) non-sensitizer. Repeated Dose toxicity 28 days inhalation NOAEL: 3.4 mg/l (rabbit). Mutagenicity Genetic Toxicity in Vitro: Ames: Negative (salmonella typhimurium, metabolic activation with/without). Carcinogenicity: Ethyl benzene was tested by inhalation exposure in mice and rats. In mice, there was an increased incidence of lung adenomas in males and liver adenomas in females. In male rats, there was an increased incidence of renal tubule adenomas and carcinomas. Two Studies of workers potentially exposed to ethyl benzene in a production plant and a styrene polymerization plant, showed no excess cancer incidence and no excess cancer mortality during a 15 year follow-up. Toxicity to Reproduction/Fertility: Inhalation (monkey, male) Reproductive effects have been observed in animal studies, In a generation study, inhalation (rat/female) NOAEL (parental): 100ppm NOAEL (F2): 100ppm. Developmental Toxicity/Teratogenicity rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 100ppm (maternal): 100ppm. Teratogenic effects seen only with maternal toxicity., Fetotoxicity seen only with maternal toxicity. Rabbit, female, inhalation, gestation, daily, NOAEL (teratogenicity) < 1000 mg/m3, NOAEL (maternal) < 1000 mg/m3.

SECTION 12: ECOLOGICAL INFORMATION

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

Component Butanol CAS# 71-36-3: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are more toxic.

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

Component Xylene: Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l, Aquatic Invertebrates: Toxic 1 < LC/EC/IC50 <10mg/l, Algae: Toxic 1 < LC/EC/IC50 <10 mg/l. Mobility – floats on water. If it enters the soil it will be highly mobile and may contaminate groundwater. Oxidizes rapidly by photo-chemical reactions in air.

COMPONENT Ethyl Benzene: Biodegradation, Aerobic, 50%, Exposure time 28 days. Biochemical Oxygen demand (BOD) 5 days, 2.8% and 35 days, 1780 mg/g. Bioaccumulation: Cyprinus carpio (Carp), 15 BCF. Acute and Prolonged Toxicity to Fish LC50: 12.1 mg/l (fathead minnow, 96 h). Acute Toxicity to Aquatic Invertebrates EC50: 1.8-2.9 mg/l (water flea, 48 h). Toxicity to Aquatic Plants EC50: 4.6 mg/l (green algae, 72 h). Toxicity to microorganisms EC50: 130 mg/l (activated sludge microorganisms, 48 hr).

SECTION 13: WASTE DISPOSAL

SAFETY DATA SHEET

PRODUCT CODE: 201 P A

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: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, BUTANOLS), 3, PG III

IMO/IMDG: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, BUTANOLS, Bisphenol A Diglycidyl Ether Polymer), 3, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

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 Butanol CAS# 71-36-3: Sara 313 – 40 CFR 372.65 chemical. CERCLA 40 CFR 302.4 (a) Chemical RQ=5000 pounds. On the TSCA list. On the DSL, AICS, ECL, EINECS, and ENCS lists. Butanol is on the Pennsylvania and New Jersey Right to Know lists

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 Xylene: Xylene contains EPCRA section 313 chemicals subject to the reporting requirements of the emergency planning and community right to know act of 1968. (Maximum wt % for components of xylene are: M-Xylene CAS# 108-38-3 is 46%, P-Xylene CAS# 106-42-3 is 20%, Ethyl Benzene CAS# 100-41-4 is 19%, O-Xylene CAS# 95-47-6 is 16%.. Xylene and its components are on the California Proposition 65 list for developmental toxicity, Reproductive toxicity and carcinogen list. Ingredients are on the TSCA list, DSL Canada, AICS, China, EINECS, ENCS, Korea, New Zealand, Phillipines inventory lists and on the Massachusetts, New Jersey, Pennsylvania right to know lists Ethyl Benzene a component of xylene has been designated by IARC as a possible carcinogen to humans based on increased tumor incidence in laboratory animals. risk phrases R10 Flammable R20/21 Harmful by inhalation and in contact with skin, R38 irritating to skin, S25 Avoid contact with eyes.

COMPONENT Ethyl Benzene: US EPA CERCLA Hazardous Substances (40 CFR 302): Ethyl Benzene reportable quantity 1000 lbs. US EPA Emergency Planning and Community Right to Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.5) components, Ethyl Benzene. California Prop 65: This product contains chemicals known to the State of California to be carcinogenic: Ethyl Benzene CAS# 100-41-4 @ 1-5%.

Massachusetts, New York, Pennsylvania Right to Know list includes the following components: Ethyl Benzene CAS# 100-41-4.

Massachusetts, New York, Pennsylvania Special hazardous Substance includes the following components: Ethyl Benzene CAS# 100-41-4

SECTION 16: OTHER INFORMATION

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

N/A = Not Available

See Section 1 for date of preparation

SAFETY DATA SHEET

PRODUCT CODE: 201 P B

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Oil Stop Primer - PART B
PRODUCT CODES: 201 P B

MANUFACTURER: EpoxyPro Coat, LLC
STREET ADDRESS: 1406 Mackinaw Ave.
CITY, STATE, ZIP: Cheboygan, MI 49721
INFORMATION CONTACT: John R. Davis
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DATE REVISED: 3/10/2017

Chemical Name or Class: Polyamide, coal tar and solvent mixture

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Carcinogen category 1B, Toxic to reproduction category 1B, Flammable liquid category 3, Specific target organ toxicity following repeated exposure category 2, Skin corrosion/irritation category 1B, skin sensitizer category 1B, Serious eye damage category 1, Germ cell mutagenicity category 2, Acute toxicity inhalation category 4, Acute hazard to aquatic environment category 2, Chronic hazards to aquatic environment category 2

GHS Label Elements and Precautionary Statements:

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

Hazard Statements:

Danger: May Cause cancer

Warning: Suspected of damaging fertility of the unborn child

Warning: Flammable liquid and vapor.

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

Danger: Causes severe skin burns and eye damage

Warning: May cause an allergic skin reaction

Danger: Causes severe eye damage

Warning: Suspected of causing genetic defects

Warning: Harmful if inhaled

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

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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.

P201 Obtain special instructions before use.

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

P271 Use only outdoors or in a well-ventilated area

P273 Avoid release to the environment.

Response;

P370 + P378 In case of fire: Use FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL for extinction.

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.

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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
 P310 If in eyes, immediately call a POISON CENTER or doctor/physician.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell
 P391 Collect spillage.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

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: 3 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, OR BLURRED VISION

SKIN:

MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA AND ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, HEADACHE AND POSSIBLE UNCONSCIOUSNESS

HEALTH HAZARDS (ACUTE AND CHRONIC):

AMINES CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITIES, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE OR EVEN EYE DAMAGE.

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 RESPONSE

CARCINOGENICITY

OSHA: YES NTP: YES IARC: YES

ADDITIONAL CARCINOGENICITY INFORMATION:

Product may contain ethyl benzene as a component of xylene (IARC 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.

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 pith is an IARC Group 1 Human carcinogen, an ACGIH A1 Known human carcinogen

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
*PHENOL	108-95-2	5 PPM	5 PPM	10 PPM	3
BENZYL ALCOHOL	100-51-6	NONE	NONE	NONE	1-5
HEXANEDIAMINE	124-09-4	NONE	NONE	NONE	1-5
1,2 CYCLOHEXANEDIAMINE	694-83-7	NONE	NONE	NONE	1-5
*Xylene	1330-20-7	100PPM	100PPM	150PPM	33
*ethyl benzene (as a component of xylene)	100-41-4	100ppm	100ppm	125ppm	0-5.0
*toluene (as a component of xylene)	108-88-3	200ppm	20ppm	150ppm	0-0.2
NONYL PHENOL	84852-15-3	NONE	NONE	NONE	7-13
Talc	14807-96-6	20mg/m3	20mg/m3	20mg/m3	10-30
*crystalline silica (as a component of talc)	14808-60-7	10mg/m3	.1mg/m3	.1mg/m3	(<1.0%)
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
1,2-Propanediol	57-55-6	NONE	NONE	NONE	0.1-1
*Isobutyl Alcohol	78-83-1	50PPM	50PPM	NONE	<0.5%
Salts from alkylamides and esters CAS# Trade secret (NJTSRN 800963-5040)		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)	65996-89-6	.2MG/M3	.2MG/M3	NONE	6.2

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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.
XYLENE ACGIH STEL=150PPM. ETHYL BENZENE ACGIH STEL=125PPM. REGULATORY STANDARD – NIOSH CRITERIA DOCUMENT, COAL TAR PRODUCTS. USEPA – 40CFR 112

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:

DO NOT INDUCE VOMITING, KEEP PERSON WARM AND CONSULT A PHYSICIAN 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: 89+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL

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. PRESENCE OF SOLVENTS MAY REQUIRE GROUNDING.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

IF FIRE OCCURS, SOLVENTS MAY PRODUCE EXCESSIVE PRESSURE. SEALED DRUMS MAY RUPTURE AND IGNITE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND IGNITE BY ANY SOURCE OF IGNITION. NEVER USE A CUTTING OR WELDING TORCH NEAR CONTAINERS (EVEN EMPTY). ALL 5 GALLON AND LARGER CONTAINERS SHOULD BE GROUNDED BEFORE TRANSFERRING MATERIAL.

SECTION 6: RELEASE MEASURES

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

WEAR RESPIRATOR AND PROTECTIVE CLOTHING. REMOVE ALL SOURCES OF IGNITIONS. REMOVE EXCESS WITH SPARK PROOF EQUIPMENT AND TAKE UP THE REMAINDER WITH AN ABSORBENT MATERIAL 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. KEEP MATERIAL AWAY FROM ALL SOURCES OF IGNITION.

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.

WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS.

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. ENGINEERING OR ADMINISTRATIVE MEASURES SHOULD BE TAKEN TO REDUCE THE RISK AND EXPOSURE.

VENTILATION:

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PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TOXIC LEVEL VALUES.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: BLACK LIQUID WITH SOLVENT ODOR

BOILING POINT OR RANGE: 200 TO 560F

VAPOR DENSITY (AIR = 1): N/A

SPECIFIC GRAVITY (H₂O = 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

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID EXCESSIVE HEAT OR OPEN FLAMES AS WELL AS ALL SOURCES OF IGNITION SUCH AS SPARKS, HEATERS, AND STATIC DISCHARGES ETC.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID EPOXY RESIN AGENTS IN UNCONTROLLED AMOUNTS AND STRONG OXIDIZING AGENTS AS WELL AS STRONG ACIDS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

MAY FORM TOXIC CHEMICALS, CARBON DIOXIDE, CARBON MONOXIDE AND VARIOUS HYDROCARBONS ETC..

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

Comonent Xylene: Inhalation LC50 26800ppm, Skin LD50 2000 mg/kg, Ingestion LD50 4.3 g/kg. Exposure may effect skin, eye, liver, kidney, nervous system, respiratory system and lungs. High concentrations may lead to nervous system effects. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Xylene may contain ethyl benzene, and toluene. Ethyl benzene has shown limited evidence of a carcinogenic effect.

COMPONENT Ethyl Benzene: Acute Oral toxicity LD50: ca. 3500 mg/kg (rat); Acute inhalation LC50: 17.2 mg/l 4h (rat); Acute Dermal Toxicity: 17,800 mg/kg (rabbit); Skin Irritation rabbit Draize exposure time 24h – slightly irritating. Eye Irritation rabbit Draize – severely irritating. Sensitization dermal (human patch test) non-sensitizer. Repeated Dose toxicity 28 days inhalation NOAEL: 3.4 mg/l (rabbit). Mutagenicity Genetic Toxicity in Vitro: Ames: Negative (salmonella typhimurium, metabolic activation with/without). Carcinogenicity: Ethyl benzene was tested by inhalation exposure in mice and rats. Ibn mice, there was an increased incidence of lung adenomas in males and liver adenomas in females. In male rats, there was an increased incidence of renal tubule adenomas and carcinomas. Two Studies of workers potentially exposed to ethyl benzene in a production plant and a styrene polymerization plant, showed no excess cancer incidence and no excess cancer mortality during a 15 year follow-up. Toxicity to Reproduction/Fertility: Inhalation (monkey, male) Reproductive effects have been observed in animal studies, In a generation study, inhalation (rat/female) NOAEL (parental): 100ppm NOAEL (F2): 100ppm. Developmental Toxicity/Teratogenicity rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 100ppm (maternal): 100ppm. Teratogenic effects seen only with maternal toxicity., Fetotoxicity seen only with maternal toxicity. Rabbit, female, inhalation, gestation, daily, NOAEL (teratogenicity) < 1000 mg/m3, NOAEL (maternal) < 1000 mg/m3.

Component(s): *PHENOL CAS# 108-95-2, HEXANEDIAMINE CAS# 124-09-4, 1,2 CYCLOHEXANEDIAMINE CAS# 694-83-7: LD50 >2000 mg/kg (estimated) (rat)

Component Benxyl 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.

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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/m³ 24hr – corrosive. Eyes Draize test rabbit, 57.00/110 – extremely irritating. Component is a possible risk of impaired fertility.

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# 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 CAS# 57-55-6: LD50 = 20000 mg/kg

Component Isobutyl Alcohol CAS# 78-83-1: LD50 Dermal (rabbit) = 3400 mg/kg

COMPONENT COAL TAR PITCH CAS# 65996-89-6:

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).

SECTION 12: ECOLOGICAL INFORMATION

Component Xylene: Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l, Aquatic Invertebrates: Toxic 1 < LC/EC/IC50 <10mg/l, Algae: Toxic 1 < LC/EC/IC50 <10 mg/l. Mobility – floats on water. If it enters the soil it will be highly mobile and may contaminate groundwater. Oxidizes rapidly by photo-chemical reactions in air.

COMPONENT Ethyl Benzene: Biodegradation, Aerobic, 50%, Exposure time 28 days. Biochemical Oxygen demand (BOD) 5 days, 2.8% and 35 days, 1780 mg/g. Bioaccumulation: Cyprinus carpio (Carp), 15 BCF. Acute and Prolonged Toxicity to Fish LC50: 12.1 mg/l (fathead minnow, 96 h). Acute Toxicity to Aquatic Invertebrates EC50: 1.8-2.9 mg/l (water flea, 48 h). Toxicity to Aquatic Plants EC50: 4.6 mg/l (green algae, 72 h). Toxicity to microorganisms EC50: 130 mg/l (activated sludge microorganisms, 48 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 Phenol CAS# 108-95-2: EC50 (48 hours) 6.6 mg/l (species Daphnia). (low bioaccumulation potential)

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

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 COAL TAR PITCH CAS# 65996-89-6:

Ecotoxicity: No data available for the product, Crude Coal Tar as a whole. However, individual components of the product have been found to be toxic to the environment. Liquid may migrate into soil and groundwater and be ingested by wildlife.

Mobility: No data available for the product, Crude Coal Tar as a whole. However, individual components of the product have been found to be absorbed by plants from soil.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

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

SECTION 14: Transport Information

DOT: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, BUTANOLS, COAL TAR), 3, PG III, MARINE POLLUTANT

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IMO/MDG: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, BUTANOLS, COAL TAR), 3, PG III, MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

No data for the product itself.

Component data:

Component Xylene: Xylene contains EPCRA section 313 chemicals subject to the reporting requirements of the emergency planning and community right to know act of 1968. (Maximum wt % for components of xylene are: M-Xylene CAS# 108-38-3 is 46%, P-Xylene CAS# 106-42-3 is 20%, Ethyl Benzene CAS# 100-41-4 is 19%, O-Xylene CAS# 95-47-6 is 16%.. Xylene and its components are on the California Proposition 65 list for developmental toxicity, Reproductive toxicity and carcinogen list. Ingredients are on the TSCA list, DSL Canada, AICS, China, EINECS, ENCS, Korea, New Zealand, Phillipines inventory lists and on the Massachusetts, New Jersey, Pennsylvania right to know lists. Ethyl Benzene a component of xylene has been designated by IARC as a possible carcinogen to humans based on increased tumor incidence in laboratory animals. risk phrases R10 Flammable R20/21 Harmful by inhalation and in contact with skin, R38 irritating to skin, S25 Avoid contact with eyes.

COMPONENT Ethyl Benzene: US EPA CERCLA Hazardous Substances (40 CFR 302): Ethyl Benzene reportable quantity 1000 lbs. US EPA Emergency Planning and Community Right to Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.5) components, Ethyl Benzene. California Prop 65: This product contains chemicals known to the State of California to be carcinogenic: Ethyl Benzene CAS# 100-41-4 @ 1-5%.

Massachusetts, New York, Pennsylvania Right to Know list includes the following components: Ethyl Benzene CAS# 100-41-4.

Massachusetts, New York, Pennsylvania Special hazardous Substance includes the following components: Ethyl Benzene CAS# 100-41-4

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

Component(s): *PHENOL CAS# 108-95-2, HEXANEDIAMINE CAS# 124-09-4, 1,2 CYCLOHEXANEDIAMINE CAS# 694-83-7:

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

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# 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 CAS# 57-55-6: Listed on TSCA and DSL

Component Isobutyl Alcohol CAS# 78-83-1: Component is on TSCA, EINECS and Canada DSL lists. Section 4 test rules/section 12 export notification for isobutyl alcohol.

COMPONENT COAL TAR PITCH CAS# 65996-89-6:

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.

SAFETY DATA SHEET

PRODUCT CODE: 201 P B

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, 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