SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMASTIC URETHANE WTB PART A Product Code: A4-1864W

Manufacturer's Name: Induron Protective Coatings, LLC Address: 3333 Richard Arrington Blvd. N. Birmingham, Alabama 35234

Emergency Phone: 1-800-424-9300 Information Phone: (205)324-9584

Section 2 - Composition / Information on Ingredients

GHS Ratings:

Flammable Oral Toxicit Skin corros	y Ac	cute Tox. 3	Flash point >= 23°C and <= 60°C (140°F) Oral>50+<=300mg/kg Reversible adverse effects in dermal tissue, Draize score:
F			>= 2.3 < 4.0 or persistent inflammation
Eye corrosi	ve 2A	A	Eye irritant: Subcategory 2A, Reversible in 21 days
Skin sensiti	zer 1		Skin sensitizer
Mutagen	1B		Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogen	1B	-	Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity
Reproductiv	/e toxin 1B	3	Presumed, Based on experimental animals
GHS Hazards			

H226	Flammable liquid and vapour.
H301	Toxic if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
GHS Precautions	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
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 equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash equipment and contaminated skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required
P321	Wash contaminated skin, follow Physcian's instructions for treatment.
P330	Rinse mouth

P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
	Rinse skin with water/shower
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact
	lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use CO2, water spray, foam, or dry chemical to extinguish.
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance to approriate regulations and laws.

Signal Word: Danger



Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

Section 3 - Hazards Identification				
Chemical Name	CAS number	Weight Concentration %		
Titanium Dioxide Colorant	13463-67-7	20.00% - 30.00%		
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	20.00% - 30.00%		
Calcium Carbonate (limestone)	1317-65-3	5.00% - 10.00%		
Kaolin	1332-58-7	1.00% - 5.00%		
DIPROPYLENE GLYCOL n-BUTYL ETHER	29911-28-2	1.00% - 5.00%		
2-ETHYL BENZENE	100-41-4	0.10% - 1.00%		
Naptha(Pet), light arom.	64742-95-6	0.10% - 1.00%		

Section 4 - First Aid Measures

INHALATION - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

INGESTION - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the

head below the hips to prevent aspiration of liquid into the lungs. Notes to Physician: No data found

Section 5 - Fire Fighting Measures

Flash Point: 26 C (79 F) LEL: 1.00

Flamable Product

UEL: 20.00

EXTINGUISHING MEDIA: Use carbon dioxide (CO2), "alcohol" foam, dry chemical systems, water fog, water spray. **UNUSUAL FIRE OR EXPLOSION HAZARDS:** Under normal storage conditions this product is stable. **HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon and hydrocarbons

FIRE FIGHTING: If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.Use water spray to cool unopened containors. **FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations. LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant with water for alkyd type spills.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

STORAGE: Prevent from freezing. Do not store above 120 F (49 C).

Store only in original containers.

REGULATORY REQUIREMENTS: No data found.

Section 8 - Exposure Controls / Personal Protection				
Chemical Name / CAS No. OSHA Exposure Limits ACGIH Exposure Limits Other Exposure Limits				
Titanium Dioxide Colorant 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established	

Benzene, 1-chloro-4- (trifluoromethyl)- 98-56-6	Not Established	Not Established	Not Established
Calcium Carbonate (limestone) 1317-65-3	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not Established	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Kaolin 1332-58-7	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
DIPROPYLENE GLYCOL n- BUTYL ETHER 29911-28-2	Not Established	Not Established	Not Established
2-ETHYL BENZENE 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Naptha(Pet), light arom. 64742-95-6	Not Established	Not Established	Not Established

ENGINEERING: Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

ADMINISTRATIVE CONTROLS: No data found.

PROTECTIVE EQUIPMENT: Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Coating VOC Lb/Gal 0.73	
Odor: N/A	
Odor threshold: N/A	
pH: N/A	
Melting point: N/A	
Solubility: N/A	
Flash point: 79 F,26 C	
Flammability: N/A	
Partition coefficient (n- N/A octanol/water):	
Decomposition temperature: N/A	

Section 10 - Stability and Reactivity

Stability: This product is stal	ole under	normal	storage	conditions.
STABLE				

Avoid strong oxidizing agents.

This mixture is likely to exhibit the following combustion products: Carbon oxides.

Section 11 - Toxicological Information				
ixture Toxicity				
Oral Toxicity LD50: 1	23mg/kg			
Inhalation Toxicity LO	C50: 121mg/L			
outes of Entry:				
•	may affect the following organs:			
Eyes Centra	l Nervous System Skin	Respiratory Syste	em	
ffects of Overexposure)			
	llowing chemicals comprise 0.1% o			
	llowing chemicals comprise 0.1% o carcinogens by NTP, IARC, OSHA (<u>Description</u> 2-ETHYL BENZENE			
arcinogens or potential CAS Number	carcinogens by NTP, IARC, OSHA (<u>Description</u>	mandatory listing), or ACG <u>% Weight</u>	IH (optional listing). <u>Carcinogen Rating</u> 2-ETHYL BENZENE: IARC: Possible human carcinogen	

Ecological information: No data found.

Component Ecotoxicity	
Benzene, 1-chloro-4- (trifluoromethyl)-	48 Hr EC50 Daphnia magna: 3.68 mg/L
DIPROPYLENE GLYCOL n- BUTYL ETHER	96 Hr LC50 Poecilia reticulata: 841 mg/L [static]
2-ETHYL BENZENE	 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

Section 14 - Transport Information					
Section 14 - Transport Information					
Agency Proper Shipping Name UN Number Packing Group Hazard Class					
DOT	PAINT	1263	III	3	
IATA PAINT 1263 III 3					
	15:	Regulatory Information			

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

100-41-4 2-ETHYL BENZENE 0.1 to 1.0 % 13463-67-7 Titanium Dioxide Colorant 20 to 30 %

HAZARDOUS AIR POLLUTANTS 100-41-4 2-ETHYL BENZENE

MASSACHUSETTS RIGHT TO KNOW 100-41-4 2-ETHYL BENZENE 0.1 to 1.0 % 1332-58-7 Kaolin 1 to 5 % 1317-65-3 Calcium Carbonate (limestone) 5 to 10 % 13463-67-7 Titanium Dioxide Colorant 20 to 30 %

NEW JERSEY RIGHT TO KNOW

100-41-4 2-ETHYL BENZENE 0.1 to 1.0 % 1332-58-7 Kaolin 1 to 5 % 1317-65-3 Calcium Carbonate (limestone) 5 to 10 % 13463-67-7 Titanium Dioxide Colorant 20 to 30 %

PENNSYLVANIA RIGHT TO KNOW 100-41-4 2-ETHYL BENZENE 0.1 to 1.0 % 1332-58-7 Kaolin 1 to 5 % 1317-65-3 Calcium Carbonate (limestone) 5 to 10 % 13463-67-7 Titanium Dioxide Colorant 20 to 30 %

29911-28-2 DIPROPYLENE GLYCOL n-BUTYL ETHER

CHEMICAL LIST FOR SARA 313 100-41-4 2-ETHYL BENZENE

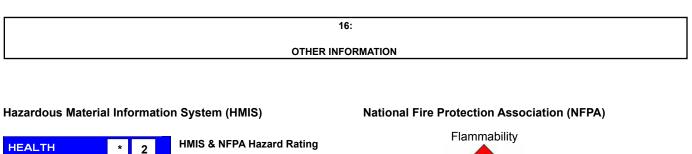
Country

Regulation

EU Risk Phrases

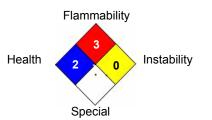
Safety Phrase

- None





HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH



Reviewer Revision

Date Prepared: 8/24/2016

SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMASTIC URETHANE CTB PART A Product Code: A4-1867C

Manufacturer's Name: Induron Protective Coatings, LLC Address: 3333 Richard Arrington Blvd. N. Birmingham, Alabama 35234

Emergency Phone: 1-800-424-9300 Information Phone: (205)324-9584

Section 2 - Composition / Information on Ingredients

GHS Ratings:

	Flammable liquid Oral Toxicity Skin corrosive	3 Acute Tox. 3 2	Flash point >= 23°C and <= 60°C (140°F) Oral>50+<=300mg/kg Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
	Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
	Skin sensitizer	1	Skin sensitizer
	Mutagen	1B	Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
	Carcinogen	1B	Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity
	Reproductive toxin	1B	Presumed, Based on experimental animals
<u>GHS Ha</u>	azards		

H226	Flammable liquid and vapour.
H301	Toxic if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H340	May cause genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
GHS Precautions	
P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
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 equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash equipment and contaminated skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required
P321	Wash contaminated skin, follow Physcian's instructions for treatment.
P330	Rinse mouth

P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
	Rinse skin with water/shower
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact
	lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use CO2, water spray, foam, or dry chemical to extinguish.
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance to approriate regulations and laws.

Signal Word: Danger



Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

Section 3 - Hazards Identification					
Chemical Name CAS number Weight Concentrat					
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	30.00% - 40.00%			
Calcium Carbonate (limestone)	1317-65-3	10.00% - 20.00%			
Kaolin	1332-58-7	1.00% - 5.00%			
DIPROPYLENE GLYCOL n-BUTYL ETHER	29911-28-2	1.00% - 5.00%			
2-ETHYL BENZENE	100-41-4	0.10% - 1.00%			
Naptha(Pet), light arom.	64742-95-6	0.10% - 1.00%			

Section 4 - First Aid Measures

INHALATION - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

INGESTION - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs.

Section 5 - Fire Fighting Measures

Flash Point: 27 C (81 F) LEL: 1.00 Flamable Product

UEL: 20.00

EXTINGUISHING MEDIA: Use carbon dioxide (CO2), "alcohol" foam, dry chemical systems, water fog, water spray. **UNUSUAL FIRE OR EXPLOSION HAZARDS:** Under normal storage conditions this product is stable. **HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon and hydrocarbons

FIRE FIGHTING: If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure. Use water spray to cool unopened containors. **FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations. LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant with water for alkyd type spills.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

STORAGE: Prevent from freezing. Do not store above 120 F (49 C).

Store only in original containers.

REGULATORY REQUIREMENTS: No data found.

Section 8 - Exposure Controls / Personal Protection						
Chemical Name / CAS No. OSHA Exposure Limits ACGIH Exposure Limits Other Exposure Limits						
Benzene, 1-chloro-4- (trifluoromethyl)- 98-56-6	Not Established	Not Established	Not Established			

Calcium Carbonate (limestone) 1317-65-3	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	Not Established	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Kaolin 1332-58-7	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
DIPROPYLENE GLYCOL n- BUTYL ETHER 29911-28-2	Not Established	Not Established	Not Established
2-ETHYL BENZENE 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Naptha(Pet), light arom. 64742-95-6	Not Established	Not Established	Not Established

ENGINEERING: Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

ADMINISTRATIVE CONTROLS: No data found.

PROTECTIVE EQUIPMENT: Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Autoignition temperature: N/A	Decomposition temperature: N/A	
Explosive Limits: N/A	Partition coefficient (n- N/A octanol/water):	
Evaporation rate: N/A	Flammability: N/A	
Boiling range: 141°C	Flash point: 81 F,27 C	
Freezing point: N/A	Solubility: N/A	
DENSITY 12.45	Melting point: N/A	
Vapor Density: 6.2	pH: N/A	
Vapor Pressure: 7.2 mmHg	Odor threshold: N/A	
Appearance: N/A	Odor: N/A	
Viscosity: N/A	Coating VOC Lb/Gal 0.74	

Section 10 - Stability and Reactivity

Stability: This product is stable under normal storage conditions. STABLE

Avoid strong oxidizing agents.

This mixture is likely to exhibit the following combustion products: Carbon oxides.

Hazardous polymerization will not occur.

Section 11 - Toxicological Information Mixture Toxicity Oral Toxicity LD50: 108mg/kg Inhalation Toxicity LD50: 90mg/L Routes of Entry: Exposure to this material may affect the following organs: Eyes Central Nervous System Skin Respiratory System Effects of Overexposure Effects of Overexposure Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). CAS Number Description 100-41-4 2-ETHYL BENZENE 100-41-4 2-ETHYL BENZENE 100-41-4 2-ETHYL BENZENE 64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.; EU REACH: Present (P) Ecological information: No data found. Component Ecotoxicity Berzene, 1-chlorc-4- 48 Hr EC50 Daphnia magna: 3.68 mg/L (trifluoromethyl)- DIPROPYLENE GLYCOL n- 96 Hr LC50 Oncorhynchus mykiss: 41 mg/L [static] BUTYL ETHER 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 42 mg/L [semi-static]; 96 Hr LC50 Orcorhynchus mykiss: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 42 mg/L [static]; 96 Hr LC50 Prepudokirchneriella subcapitat: 1.7 - 7.6 mg/L [static] 2-ETHYL BENZENE	Hazardous polymerizati	on will not occur.				
Oral Toxicity LDS0: 108mg/kg Inhalation Toxicity LCS0: 90mg/L Routes of Entry: Exposure to this material may affect the following organs: Eyes Central Nervous System Skin Respiratory System Effects of Overexposure Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). <u>CAS Number</u> Description % Weight Carcinogen Rating 100-41-4 2-ETHYL BENZENE 1 to 1.0% 2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA.: listed 64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) Ecological information: No data found. Component Ecotoxicity Benzene, 1-chioro-4- (#fillowromethyl)- DIPROPYLENE GLYCOL n- 96 Hr LC50 Opecilia reticulata: 841 mg/L [static] BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 17.5 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through]; 96 Hr LC50 Pimephales prometas: 7.55 - 11 mg/L [fow-through];		Section 11 - Toxico	ological Information			
Exposure to this material may affect the following organs: Eyes Central Nervous System Skin Respiratory System Effects of Overexposure Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). <u>CAS Number</u> Description % Weight Carcinogen Rating 100-41-4 2-ETHYL BENZENE .1 to 1.0% 2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed 64742-95-6 Naptha(Pet), light arom1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl). DIPROPYLENE GLYCOL n- BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Poecilia reticulata: 841 mg/L [static] BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Orocorhynchus mykiss: 42. mg/L [static]; 96 Hr LC50 Orocorhynchus mykiss: 42. mg/L [static]; 96 Hr LC50 Promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 pesudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.45 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 2.45 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella Subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella S	Oral Toxicity LD50: 108m					
Eyes Central Nervous System Skin Respiratory System Effects of Overexposure Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). CAS.Number Description % Weight Carcinogen Rating 100-41-4 2-ETHYL BENZENE 1 to 1.0% 2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed 64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) Ecological information: No data found. Ecological Information: No data found. Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) DIPROPYLENE GLYCOL n- 96 Hr LC50 Daphnia magna: 3.68 mg/L (trifluoromethyl). 96 Hr LC50 Poecilia reticulata: 841 mg/L [static] BurYL [static]: 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]: 96 Hr LC50 Oncorhynchus mykiss: 41.2 mg/L [static]: 96 Hr LC50 Pinephales promelas: 7.5 - 11 mg/L [flow-through]: 96 Hr LC50 Pinephales promelas: 7.5 - 11 mg/L [flow-through]: 96 Hr LC50 Pinephales promelas: 9.6 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]: 96 Hr LC50 Pinephales promelas: 9.6 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]: 96 Hr LC50 Pinephales promelas: 9.6 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]: 96 Hr LC50 Pinephales promelas: 7.1 - 1.6 mg/L [static]: 96 Hr LC50 Pinephales promelas: 7.1 - 1.6 mg/L [static]: 96 Hr LC50 Pinephales promelas: 7.	Routes of Entry:					
Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). CAS Number Description % Weight Carcinogen Rating 100-41-4 2-ETHYL BENZENE 1 to 1.0% Carcinogen Rating 64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) Section 12 - Ecological Information Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)- 96 Hr LC50 Daphnia magna: 3.68 mg/L (trifluoromethyl)- DIPROPYLENE GLYCOL n- BUTYL ETHER 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Piecidia reticulata: 9.6 mg/L [static]; 96 Hr LC50 Piecidia reticulata: 9.6 mg/L [static]; 96 Hr LC50 Piecidia reticulata: 9.1 mg/L [flow-through]; 96 Hr LC50 Piecidia reticulata: 2.6 mg/L [static]; 96 Hr LC50 Piecidia reticulata: 9.6 mg/L [static]; 96 H		00	Respiratory Syste	m		
carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). <u>CAS Number</u> 100-41-4 2-ETHYL BENZENE 2-ETHYL BENZENE 1 to 1.0% 2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed 64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU REACH: Present (P) Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)- DIPROPYLENE GLYCOL n- BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Poecilia reticulata: 841 mg/L [static] BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 84 mg/L 72 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.45 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.45 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.45 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.7 - 7.6 mg/L [static]	Effects of Overexposure					
REACH: Present (P) REACH: Present (P) REACH: Present (P) Section 12 - Ecological Information Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)- 48 Hr EC50 Daphnia magna: 3.68 mg/L DIPROPYLENE GLYCOL n- BUTYL ETHER 96 Hr LC50 Poecilia reticulata: 841 mg/L [static] 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L, 72 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L, 72 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static] Naptha(Pet), light arom. 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L	carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). <u>CAS Number</u> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u> 100-41-4 2-ETHYL BENZENE 1 to 1.0% 2-ETHYL BENZENE: IARC: Possible human carcinogen Possible human carcinogen					
Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)- DIPROPYLENE GLYCOL n- BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 2438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static] Naptha(Pet), light arom. 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L	64742-95-6	Naptha(Pet), light arom.	1 to 1.0%			
Ecological information: No data found. Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)- DIPROPYLENE GLYCOL n- BUTYL ETHER 2-ETHYL BENZENE 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 2438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static] Naptha(Pet), light arom. 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L		Section 12 - Ecol	ogical Information			
Component Ecotoxicity Benzene, 1-chloro-4- (trifluoromethyl)-48 Hr EC50 Daphnia magna: 3.68 mg/LDIPROPYLENE GLYCOL n- BUTYL ETHER96 Hr LC50 Poecilia reticulata: 841 mg/L [static]2-ETHYL BENZENE96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]Naptha(Pet), light arom.96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L			-9			
Benzene, 1-chloro-4- (trifluoromethyl)-48 Hr EC50 Daphnia magna: 3.68 mg/LDIPROPYLENE GLYCOL n- BUTYL ETHER96 Hr LC50 Poecilia reticulata: 841 mg/L [static]2-ETHYL BENZENE96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]Naptha(Pet), light arom.96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L	Ecological information: No dat	ta found.				
BUTYL ETHER2-ETHYL BENZENE96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]Naptha(Pet), light arom.96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L	Benzene, 1-chloro-4-	48 Hr EC50 Daphnia ı	magna: 3.68 mg/L			
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	Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella					

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product

enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

	Section 14 - 1	Fransport Information		
Section 14 - Tr	ansport Information			
	r Shipping Name	<u>UN Number</u>	Packing Group	Hazard Class
DOT PAINT		1263	III 	3
IATA PAINT		1263	111	3
	15: Regul	atory Information		
product contains the eproductive toxin:	afe Drinking Water and Toxic Enforceme following chemicals which are listed by HYL BENZENE 0.1 to 1.0 %			
HAZARDOUS AIR P 100-41-4 2-ETI				
1332-58-7 Kao	HYL BENZENE 0.1 to 1.0 %			
NEW JERSEY RIGH 100-41-4 2-ETI 1332-58-7 Kao	HYL BENZENE 0.1 to 1.0 %			
PENNSYLVANIA RI(100-41-4 2-ETI 1332-58-7 Kao	HYL BENZENE 0.1 to 1.0 %			
29911-28-2 DIF	PROPYLENE GLYCOL n-BUTYL ETHEF	२		
CHEMICAL LIST FC 100-41-4 2-ETI				
<u>Country</u>	Regulation		All Componen	<u>ts Listed</u>
U Risk Phrases				
Safety Phrase				

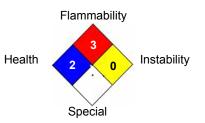
- None

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)



- HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE
- 3 = HIGH



Reviewer Revision

Date Prepared: 8/23/2016

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMASTIC ACTIVATOR Product Code: Q4-1216

Trade Name: POLYMERIC HMDI

Manufacturer's Name: Induron Protective Coatings, LLC Address: 3333 Richard Arrington Blvd. N. Birmingham, Alabama 35234

Emergency Phone: 1-800-424-9300 Information Phone: (205)324-9584

Section 2 - Composition / Information on Ingredients

GHS Ratings:

	Flammable liquid Inhalation Toxicity	3 Acute Tox. 4	Flash point >= 23°C and <= 60°C (140°F) Gases>2500+<=5000ppm, Vapors>10+<=20mg/l, Dusts&mists>1+<=5mg/l
	Skin sensitizer Organ toxin single	1 3	Skin sensitizer Transient target organ effects- Narcotic effects- Respiratory tract irritation
<u>GHS H</u>	exposure		
<u>613 n</u>	<u>azarus</u>		
	H226	Flammable liquid and	-
	H317	May cause an allergi	c skin reaction
	H332	Harmful if inhaled	
	H335	May cause respirator	ry irritation
<u>GHS P</u>	recautions		
	P210	Keep away from hea	t/sparks/open flames/hot surfaces - No smoking.
	P233	Keep container tight	· · ·
	P241	Use explosion-proof	electrical equipment.
	P242	Use only non-sparkir	ng tools.
	P243	Take precautionary r	neasures against static discharge.
	P261	Avoid breathing dust	/fume/gas/mist/vapours/spray.
	P271	Use only outdoors or	in a well-ventilated area
	P272	Contaminated work of	clothing should not be allowed out of the workplace.
	P280	Wear protective glov	es/protective clothing/eye protection/face protection.
	P281	Use personal protect	tive equipment as required
	P285	In case of inadequate	e ventilation wear respiratory protection
	P312	Call a POISON CEN	TER or doctor/physician if you feel unwell
	P363	Wash contaminated	clothing before reuse
	P302+P352	IF ON SKIN: Wash w	<i>v</i> ith soap and water
	P303+P361+P353	IF ON SKIN (or hair)	: Remove/Take off immediately all contaminated clothing.
		Rinse skin with wate	
	P304+P341		hing is difficult, remove victim to fresh air and keep at rest in
		a position comfortab	-
	P308+P313	IF exposed or conce	rned: Get medical advice/attention
	P333+P313		ash occurs: Get medical advice/attention
	P370+P378	In case of fire: Use C	CO2, water spray, foam, or dry chemical to extinguish.
	P405	Store locked up	
	P403+P235		ated place. Keep cool
	P501	Dispose of contents/	container in accordance to approriate regulations and laws.

Signal Word: Warning



Preexisting skin, eye, and respiratory disorders may be aggravated by exposure to this product. Impaired kidney and liver functions from preexisting disorders may be aggravated by exposure to this product.

Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention). Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side.

Section 3 - Hazards Identification					
Chemical Name CAS number Weight Concentration					
Homopolymer of Hexamethylene Diisocyanate.	28182-81-2	80.00% - 90.00%			
n-BUTYL ACETATE	123-86-4	1.00% - 5.00%			
Naptha(Pet), light arom.	64742-95-6	1.00% - 5.00%			
Mixed Xylenes	1330-20-7	0.10% - 1.00%			
Benzene, 1, 3, 5-trimethyl	108-67-8	0.10% - 1.00%			
HEXAMETHYLENE DIISOCYANATE	822-06-0	0.10% - 1.00%			
* 1,2,4-TRIMETHYL BENZENE	95-63-6	0.10% - 1.00%			

Section 4 - First Aid Measures

INHALATION - If product solids are inhaled either as dust or in the form of a spray mist, remove the person from exposure immediately. If breathing is difficult, irregular, or has stopped, start resuscitation; call a physician. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

INGESTION - If material is ingested, seek immediate medical attention. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Notes to Physician: No data found

Section 5 - Fire Fighting Measures

Flash Point:	47 C (117 F)
I FI · 1 00	

UEL: 8.00

Flamable Product

EXTINGUISHING MEDIA: Use carbon dioxide (CO2), "alcohol" foam, dry chemical systems. Direct water application may cause violent frothing.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Moisture can cause significant pressure increases in the packaging, leading to pressure caused leaks or even explosions.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, hydrocarbons, hydrogen cyanide, oxides of sulfur and or zinc.

FIRE FIGHTING: If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.Use water spray to cool unopened containors. **FIRE FIGHTING:** If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel

and equipment with a water wash-down after fire and smoke exposure.

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant materials with water to prevent spontaneous combustion with alkyd type formulas.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations. LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Wet absorbant with water for alkyd type spills.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C).

STORAGE: Prevent from freezing. Do not store above 120 F (49 C). Keep in dry areas.

Store only in original containers.

REGULATORY REQUIREMENTS: No data found.

Section 8 - Exposure Controls / Personal Protection					
Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits		
Homopolymer of Hexamethylene Diisocyanate. 28182-81-2	Not Established	Not Established	Not Established		
n-BUTYL ACETATE 123-86-4	150 ppm TWA; 710 mg/m3 TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m3 TWA 200 ppm STEL; 950 mg/m3 STEL		
Naptha(Pet), light arom. 64742-95-6	Not Established	Not Established	Not Established		
Mixed Xylenes 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established		
Benzene,1,3,5-trimethyl 108-67-8	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA		

HEXAMETHYLENE DIISOCYANATE 822-06-0	Not Established	0.005 ppm TWA	NIOSH: 0.005 ppm TWA; 0.035 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.140 mg/m3 Ceiling (10 min)
* 1,2,4-TRIMETHYL BENZENE 95-63-6	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA

ENGINEERING: Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits.

ADMINISTRATIVE CONTROLS: No data found.

PROTECTIVE EQUIPMENT: Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear.

Wear chemical vapor mask or air supplied mask during exposure of vapors.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Coating VOC Lb/Gal 0.49	Appearance: N/A	
Odor: N/A	Vapor Pressure: 6.1 mmHg	
Odor threshold: N/A	Flammability: N/A	
Explosive Limits: N/A	Vapor Density: 4.3	
pH: N/A	DENSITY 9.84	
Melting point: N/A	Freezing point: N/A	
Solubility: N/A	Boiling range: 126°C	
Flash point: 117 F,47 C	Evaporation rate: N/A	
Partition coefficient (n- N/A octanol/water):	Autoignition temperature: N/A	
Decomposition temperature: N/A	Viscosity: N/A	

Section 10 - Stability and Reactivity

Stability: The product is stable under normal storage conditions

STABLE

The product is unstable in the presence of water, and active hydrogen containing compounds such as amines, alcohols, and acids.

This mixture is likely to exhibit the following combustion products: Carbon oxides, hydrogen cyanide, alipahtic compounds, and oxides of sulfur and zinc.

	Section 11 - Toxico	ological Information	
fixture Toxicity Oral Toxicity LD50: 84mg/kg Inhalation Toxicity LC50: 5mg/L			
Routes of Entry: Skin, Eyes, Breathin	ıg		
Exposure to this material may affect t Blood Eyes Central N		ungs, eyes, internal orgar Skin Respiratory	
ffects of Overexposure			
	-		
	Section 12 - Ecol	logical Information	
Component Ecotoxicity			
component Ecotoxicity n-BUTYL ACETATE	promelas: 17 - 19 mg/	/L [flow-through]	tatic]; 96 Hr LC50 Pimephales ' mg/L
	promelas: 17 - 19 mg/ 72 Hr EC50 Desmode	/L [flow-through] esmus subspicatus: 674.7 nchus mykiss: 9.22 mg/L	-
n-BUTYL ACETATE	promelas: 17 - 19 mg/ 72 Hr EC50 Desmode 96 Hr LC50 Oncorhyn 48 Hr EC50 Daphnia 96 Hr LC50 Pimephal Oncorhynchus mykiss mykiss: 13.5 - 17.3 mg [flow-through]; 96 Hr L macrochirus: 7.711 - 9 23.53 - 29.97 mg/L [st 96 Hr LC50 Cyprinus 40.75 mg/L [static]	/L [flow-through] esmus subspicatus: 674.7 nchus mykiss: 9.22 mg/L magna: 6.14 mg/L es promelas: 13.4 mg/L [s: 2.661 - 4.093 mg/L [sta g/L; 96 Hr LC50 Lepomis LC50 Lepomis macrochin 9.591 mg/L [static]; 96 Hr tatic]; 96 Hr LC50 Cyprint carpio: >780 mg/L; 96 Hr	-
n-BUTYL ACETATE Naptha(Pet), light arom.	promelas: 17 - 19 mg/ 72 Hr EC50 Desmode 96 Hr LC50 Oncorhyn 48 Hr EC50 Daphnia 96 Hr LC50 Pimephal Oncorhynchus mykiss mykiss: 13.5 - 17.3 mg [flow-through]; 96 Hr L macrochirus: 7.711 - 9 23.53 - 29.97 mg/L [st 96 Hr LC50 Cyprinus 40.75 mg/L [static] 48 Hr EC50 water flea	/L [flow-through] esmus subspicatus: 674.7 nchus mykiss: 9.22 mg/L magna: 6.14 mg/L es promelas: 13.4 mg/L [s: 2.661 - 4.093 mg/L [sta g/L; 96 Hr LC50 Lepomis LC50 Lepomis macrochin 9.591 mg/L [static]; 96 Hr tatic]; 96 Hr LC50 Cyprint carpio: >780 mg/L; 96 Hr	flow-through]; 96 Hr LC50 tic]; 96 Hr LC50 Oncorhynchus macrochirus: 13.1 - 16.5 mg/L us: 19 mg/L; 96 Hr LC50 Lepomis LC50 Pimephales promelas: us carpio: 780 mg/L [semi-static]; LC50 Poecilia reticulata: 30.26 -
n-BUTYL ACETATE Naptha(Pet), light arom. Mixed Xylenes	promelas: 17 - 19 mg/ 72 Hr EC50 Desmode 96 Hr LC50 Oncorhyn 48 Hr EC50 Daphnia 96 Hr LC50 Pimephal Oncorhynchus mykiss mykiss: 13.5 - 17.3 mg [flow-through]; 96 Hr L macrochirus: 7.711 - 9 23.53 - 29.97 mg/L [st 96 Hr LC50 Cyprinus 40.75 mg/L [static] 48 Hr EC50 water flea 96 Hr LC50 Pimephal	/L [flow-through] esmus subspicatus: 674.7 nchus mykiss: 9.22 mg/L magna: 6.14 mg/L les promelas: 13.4 mg/L [s: 2.661 - 4.093 mg/L [sta g/L; 96 Hr LC50 Lepomis LC50 Lepomis macrochim 9.591 mg/L [static]; 96 Hr tatic]; 96 Hr LC50 Cyprint carpio: >780 mg/L; 96 Hr a: 3.82 mg/L; 48 Hr LC50	r mg/L flow-through]; 96 Hr LC50 tic]; 96 Hr LC50 Oncorhynchus macrochirus: 13.1 - 16.5 mg/L us: 19 mg/L; 96 Hr LC50 Lepomis LC50 Pimephales promelas: us carpio: 780 mg/L [semi-static]; LC50 Poecilia reticulata: 30.26 - Gammarus lacustris: 0.6 mg/L

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

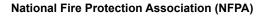
The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

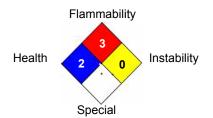
Section 14 - Transport Information					
Section 1	4 - Transport Information				
<u>Agency</u> DOT IATA	<u>Proper Shipping Name</u> PAINT PAINT		<u>UN Number</u> 1263 1263	Packing Group III III	Hazard Class 3 3
	15: R	egulatory Informa	tion		
HAZARDOL 1330-20 822-06- MASSACHL 108-67- 822-06- 1330-20 95-63-6 123-86-	hts are in compliance with TSCA inventory li S AIR POLLUTANTS 0-7 Mixed Xylenes 0 HEXAMETHYLENE DIISOCYANATE ISETTS RIGHT TO KNOW 8 Benzene,1,3,5-trimethyl 0.1 to 1.0 % 0 HEXAMETHYLENE DIISOCYANATE 0.1 0-7 Mixed Xylenes 0.1 to 1.0 % * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 4 n-BUTYL ACETATE 1 to 5 %	1 to 1.0 %	vt.		
95-63-6 822-06- 1330-20 123-86- PENNSYLV/ 1330-20 95-63-6	EY RIGHT TO KNOW * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 0 HEXAMETHYLENE DIISOCYANATE 0.7 0-7 Mixed Xylenes 0.1 to 1.0 % 4 n-BUTYL ACETATE 1 to 5 % ANIA RIGHT TO KNOW 0-7 Mixed Xylenes 0.1 to 1.0 % * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 4 n-BUTYL ACETATE 1 to 5 %	1 to 1.0 %			
	LIST FOR SARA 311)-7 Mixed Xylenes				
1330-20	LIST FOR SARA 311/312 0-7 Mixed Xylenes 31-2 Homopolymer of Hexamethylene Diiso	ocyanate.			
95-63-6	LIST FOR SARA 313 * 1,2,4-TRIMETHYL BENZENE)-7 Mixed Xylenes				
<u>Country</u>	Regulation			All Component	s Listed
EU Risk Phr	ases				
Safety Phra	<u>se</u>				
- None					

Hazardous Material Information System (HMIS)

HEALTH	2	
FLAMMABILITY	3	
PHYSICAL HAZARD	0	
PERSONAL PROTECTION	Η]

HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH





Reviewer Revision

Date Prepared: 3/10/2017