SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMA-GLOSS LV WTB PART A Product Code: A4-1594W

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 3

Oral Toxicity Acute Tox. 3

Skin corrosive 2
Eye corrosive 2A
Skin sensitizer 1
Carcinogen 1A
Reproductive toxin 1A

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

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 Physician'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

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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



Section 3 - Hazards Identification

Chemical Name	CAS number	Weight Concentration %
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	30.00% - 40.00%
Titanium Dioxide Colorant	13463-67-7	20.00% - 30.00%
Kaolin	1332-58-7	1.00% - 5.00%
DIPROPYLENE GLYCOL n-BUTYL ETHER	29911-28-2	1.00% - 5.00%
Feldspar	68476-25-5	1.00% - 5.00%
Microcrystaline silica 98.5-99.0%	14808-60-7	0.10% - 1.00%
Mixed Xylenes	1330-20-7	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 UEL: 20.00

Flamable Product

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

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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	
Titanium Dioxide Colorant 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established	
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	

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Feldspar 68476-25-5	Not Established	Not Established	Not Established
Microcrystaline silica 98.5- 99.0% 14808-60-7	.05 mg/m3 TWA	0.025 mg/m3 TWA (respirable fraction)	NIOSH: 0.05 mg/m3 TWA (respirable dust)
Mixed Xylenes 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	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:

Evaporation rate: NA	Flammability: NA	
Explosive Limits: NA	Flash point: 79F	
Partition coefficient (n- NA octanol/water):	Autoignition temperature: NA	
Decomposition temperature: NA	Viscosity: NA	
Coating VOC Lb/Gal 0.72	Appearance: NA	
Odor: NA	Vapor Pressure: NA	
Odor threshold: NA	Vapor Density: NA	
pH: NA	DENSITY 13.84	
Melting point: NA	Freezing point: NA	
Solubility: NA	Boiling range: NA	

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

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Mixture Toxicity

Oral Toxicity LD50: 150mg/kg Inhalation Toxicity LC50: 93mg/L

Component Toxicity

98-56-6 Benzene, 1-chloro-4-(trifluoromethyl)-

Oral LD50: 13 g/kg (Rat) Dermal LD50: 3 g/kg (RABBIT) Inhalation LC50: 33 mg/L (Rat)

29911-28-2 DIPROPYLENE GLYCOL n-BUTYL ETHER

Oral LD50: 1,620 µL/kg (Rat) Inhalation LC50: 42 ppm (Rat)

14808-60-7 Microcrystaline silica 98.5-99.0%

Oral LD50: 500 mg/kg (Rat)

1330-20-7 Mixed Xylenes

Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 29 mg/L (Rat)

Routes of Entry:

Exposure to this material may affect the following organs:

Eyes Lungs 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

14808-60-7 Microcrystaline silica 98.5-99.0% 1 to 1.0% Microcrystaline silica 98.5-99.0%:

NIOSH: potential occupational

carcinogen

IARC: Human carcinogen

OSHA: listed

13463-67-7 Titanium Dioxide Colorant 20 to 30% Titanium Dioxide Colorant: NIOSH:

potential occupational carcinogen IARC: Possible human carcinogen

OSHA: listed

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 12 - Ecological Information

Ecological information: No data found.

Component Ecotoxicity

Benzene, 1-chloro-4- 48 Hr EC50 Daphnia magna: 3.68 mg/L

(trifluoromethyl)-

DIPROPYLENE GLYCOL n- 96 Hr LC50 Poecilia reticulata: 841 mg/L [static]

BUTYL ETHER

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96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 -40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 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 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

All components are in compliance with TSCA inventory listing or are exempt.

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:

13463-67-7 Titanium Dioxide Colorant 20 to 30 % 14808-60-7 Microcrystaline silica 98.5-99.0% 0.1 to 1.0 %

CHEMICAL LIST FOR SARA 313 1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311/312

29911-28-2 DIPROPYLENE GLYCOL n-BUTYL ETHER 14808-60-7 Microcrystaline silica 98.5-99.0%

1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311

1330-20-7 Mixed Xylenes

MASSACHUSETTS RIGHT TO KNOW

13463-67-7 Titanium Dioxide Colorant 20 to 30 % 1332-58-7 Kaolin 1 to 5 % 14808-60-7 Microcrystaline silica 98.5-99.0% 0.1 to 1.0 %

NEW JERSEY RIGHT TO KNOW

13463-67-7 Titanium Dioxide Colorant 20 to 30 %

SDS for: A4-1594W Page 6 of 7 1332-58-7 Kaolin 1 to 5 % 14808-60-7 Microcrystaline silica 98.5-99.0% 0.1 to 1.0 %

PENNSYLVANIA RIGHT TO KNOW

13463-67-7 Titanium Dioxide Colorant 20 to 30 % 1332-58-7 Kaolin 1 to 5 % 14808-60-7 Microcrystaline silica 98.5-99.0% 0.1 to 1.0 %

Country Regulation All Components Listed

EU Risk Phrases

Safety Phrase

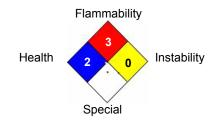
- None

16: OTHER INFORMATION

Hazardous Material Information System (HMIS)



National Fire Protection Association (NFPA)



Reviewer Revision

Date Prepared: 7/10/2018

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SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMA-GLOSS LV CTB PART A Product Code: A4-1597C

Trade Name: PERMA GLOSS LV

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 2 2 Skin corrosive 2A Eye corrosive Skin sensitizer 1 Mutagen 1B 1B Carcinogen Reproductive toxin 1A

GHS Hazards

H225	Highly flammable
H315	Causes skin irritation

H317 May cause an allergic skin reaction H319 Causes serious eye irritation H340 May cause genetic defects

May cause cancer H350

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.

Take precautionary measures against static discharge. P243 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash equipment and contaminated skin thoroughly after handling. 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

Wash contaminated skin, follow Physcian's instructions for treatment. P321

P362 Take off contaminated clothing and wash before reuse

P363 Wash contaminated clothing before reuse 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

SDS for: A4-1597C Page 1 of 7 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







Section 3 - Hazards Identification

Chemical Name	CAS number	Weight Concentration %
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	50.00% - 60.00%
Dimethyl Carbonate	616-38-6	5.00% - 10.00%
Kaolin	1332-58-7	5.00% - 10.00%
Mixed Xylenes	1330-20-7	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: 18 C (64 F)

LEL: UEL:

Flamable Product

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

SDS for: A4-1597C Page 2 of 7

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.	ical Name / CAS No. OSHA Exposure Limits ACGIH Exposure Limits Other Expos		Other Exposure Limits	
Benzene, 1-chloro-4- (trifluoromethyl)- 98-56-6	Not Established	Not Established	Not Established	
Dimethyl Carbonate 616-38-6	Not Established	Not Established	Not Established	
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)	
Mixed Xylenes 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established	
Naptha(Pet), light arom. 64742-95-6	Not Established	Not Established	Not Established	

SDS for: A4-1597C Page 3 of 7

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:

Evaporation rate: NA	Flammability: NA	
Explosive Limits: NA	Flash point: 79F	
Partition coefficient (n- NA octanol/water):	Autoignition temperature: NA	
Decomposition temperature: NA	Viscosity: NA	
Coating VOC Lb/Gal 0.39	Appearance: NA	
Odor: NA	Vapor Pressure: NA	
Odor threshold: NA	Vapor Density: NA	
pH: NA	DENSITY 11.30	
Melting point: NA	Freezing point: NA	
Solubility: NA	Boiling range: NA	

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

Inhalation Toxicity LC50: 64mg/L

Component Toxicity

98-56-6 Benzene, 1-chloro-4-(trifluoromethyl)-

Oral LD50: 13 g/kg (Rat) Dermal LD50: 3 g/kg (RABBIT) Inhalation LC50: 33 mg/L (Rat)

616-38-6 Dimethyl Carbonate

Oral LD50: 13 g/kg (Rat) Inhalation LC50: 140 mg/L (Rat)

1330-20-7 Mixed Xylenes

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Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 29 mg/L (Rat)

64742-95-6 Naptha(Pet), light arom.

Inhalation LC50: 3,400 ppm (Rat)

Routes of Entry:

Exposure to this material may affect the following organs:

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> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u>

64742-95-6 Naptha(Pet), light arom. 1 to 1.0% Naptha(Pet), light arom.: EU

REACH: Present (P)

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 12 - Ecological Information

Ecological information: No data found.

Component Ecotoxicity

Benzene, 1-chloro-4- 48 Hr EC50 Daphnia magna: 3.68 mg/L

(trifluoromethyl)-

Mixed Xylenes 96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50

Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 -

40.75 mg/L [static]

48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

Naptha(Pet), light arom. 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L

48 Hr EC50 Daphnia magna: 6.14 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).

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Section 14 - Transport Information

Section 14 - Transport Information

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	PAINT	UN1263	II	3
IOTA	PAINT	UN1263	II	3

15: Regulatory Information

All components are in compliance with TSCA inventory listing or are exempt.

CHEMICAL LIST FOR SARA 313 1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311/312 1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311 1330-20-7 Mixed Xylenes

MASSACHUSETTS RIGHT TO KNOW 616-38-6 Dimethyl Carbonate 5 to 10 % 1332-58-7 Kaolin 5 to 10 %

NEW JERSEY RIGHT TO KNOW 616-38-6 Dimethyl Carbonate 5 to 10 % 1332-58-7 Kaolin 5 to 10 %

PENNSYLVANIA RIGHT TO KNOW 616-38-6 Dimethyl Carbonate 5 to 10 % 1332-58-7 Kaolin 5 to 10 %

Country Regulation All Components Listed

EU Risk Phrases

Safety Phrase

- None

16: OTHER
INFOR
M
ATION
M

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)

SDS for: A4-1597C Page 6 of 7



HMIS & NFPA Hazard Rating Legend

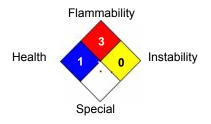
* = Chronic Health Hazard

0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH



Reviewer Revision

Date Prepared: 7/10/2018

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SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: PERMAGLOSS ACTIVATOR Product Code: Q4-1214

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 3 Flash point >= 23°C and <= 60°C (140°F)
Inhalation Toxicity Acute Tox. 4 Gases>2500+<=5000ppm, Vapors>10+<=20mg/l,

Dusts&mists>1+<=5mg/l

Skin sensitizer 1 Skin sensitizer

Organ toxin single 3 Transient target organ effects- Narcotic effects- Respiratory

exposure tract irritation

GHS Hazards

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction
H332 Harmful if inhaled

H335 May cause respiratory irritation

GHS Precautions

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

P233 Keep container tightly closed.

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.
P271 Use only outdoors or in a well-ventilated area

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

P285 In case of inadequate ventilation wear respiratory protection
P312 Call a POISON CENTER or doctor/physician if you feel unwell

P363 Wash contaminated clothing before reuse 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

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in

a position comfortable for breathing

P308+P313 IF exposed or concerned: Get medical advice/attention
P333+P313 If skin irritation or a rash occurs: 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: Warning

SDS for: Q4-1214 Page 1 of 7



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)

LEL: 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

SDS for: Q4-1214 Page 2 of 7

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 Not Established	
Homopolymer of Hexamethylene Diisocyanate. 28182-81-2	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	

SDS for: Q4-1214 Page 3 of 7

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

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.

SDS for: Q4-1214 Page 4 of 7

Section 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 84mg/kg Inhalation Toxicity LC50: 5mg/L

Routes of Entry: Skin, Eyes, Breathing

Exposure to this material may affect the following organs: Skin, lungs, eyes, internal organs.

Blood 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> <u>Description</u> <u>% Weight</u> <u>Carcinogen Rating</u>

64742-95-6 Naptha(Pet), light arom. 1 to 5% Naptha(Pet), light arom.: EU

REACH: Present (P)

Section 12 - Ecological Information

Component Ecotoxicity

n-BUTYL ACETATE 96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales

promelas: 17 - 19 mg/L [flow-through]

72 Hr EC50 Desmodesmus subspicatus: 674.7 mg/L

Naptha(Pet), light arom. 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L

48 Hr EC50 Daphnia magna: 6.14 mg/L

Mixed Xylenes 96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50

Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 -

40.75 mg/L [static]

48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]

Benzene, 1, 3, 5-trimethyl 96 Hr LC50 Pimephales promelas: 3.48 mg/L

HEXAMETHYLENE 96 Hr LC50 Brachydanio rerio: 26.1 mg/L [static]

DIISOCYANATE

* 1,2,4-TRIMETHYL BENZENE

48 Hr EC50 Daphnia magna: 6.14 mg/L

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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.

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Section 14 - Transport Information

Section 14 - Transport Information

<u>Agency</u>	Proper Shipping Name	<u>UN Number</u>	Packing Group	Hazard Class
DOT	PAINT	1263	III	3
IATA	PAINT	1263	III	3

15: Regulatory Information

All components are in compliance with TSCA inventory listing or are exempt.

HAZARDOUS AIR POLLUTANTS

1330-20-7 Mixed Xylenes

822-06-0 HEXAMETHYLENE DIISOCYANATE

MASSACHUSETTS RIGHT TO KNOW

1330-20-7 Mixed Xylenes 0.1 to 1.0 %

108-67-8 Benzene, 1, 3, 5-trimethyl 0.1 to 1.0 %

822-06-0 HEXAMETHYLENE DIISOCYANATE 0.1 to 1.0 %

95-63-6 * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 %

123-86-4 n-BUTYL ACETATE 1 to 5 %

NEW JERSEY RIGHT TO KNOW

95-63-6 * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 %

822-06-0 HEXAMETHYLENE DIISOCYANATE 0.1 to 1.0 %

1330-20-7 Mixed Xylenes 0.1 to 1.0 %

123-86-4 n-BUTYL ACETATE 1 to 5 %

PENNSYLVANIA RIGHT TO KNOW

1330-20-7 Mixed Xylenes 0.1 to 1.0 %

95-63-6 * 1,2,4-TRIMETHYL BENZENE 0.1 to 1.0 %

123-86-4 n-BUTYL ACETATE 1 to 5 %

CHEMICAL LIST FOR SARA 311

1330-20-7 Mixed Xylenes

CHEMICAL LIST FOR SARA 311/312

1330-20-7 Mixed Xylenes

28182-81-2 Homopolymer of Hexamethylene Diisocyanate.

CHEMICAL LIST FOR SARA 313

95-63-6 * 1,2,4-TRIMETHYL BENZENE

1330-20-7 Mixed Xylenes

Country Regulation All Components Listed

EU Risk Phrases

Safety Phrase

- None

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Hazardous Material Information System (HMIS)

HEALTH 2 FLAMMABILITY 3 PHYSICAL HAZARD 0 PERSONAL PROTECTION H

HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard

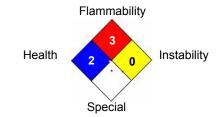
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1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



Reviewer Revision

Date Prepared: 3/10/2017

SDS for: Q4-1214 Page 7 of 7