

# SAFETY DATA SHEET

## Section 1: Manufacturer's Identification

Product Name: PERMA-CLEAN 100 EPOXY PART A Product Code: A-4165  
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:

Dermal Toxicity	Acute Tox. 3	Dermal>200+<=1000mg/kg
Skin corrosive	2	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
Carcinogen	1A	Known Human Carcinogen Based on human evidence

### GHS Hazards

H311	Toxic in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H350	May cause cancer

### GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
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
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P321	Wash contaminated skin, follow Physician's instructions for treatment.
P322	Specific measures Remove contaminated clothing and protective equipment.
P361	Remove/Take off immediately all contaminated clothing
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
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
P405	Store locked up
P501	Dispose of contents/container in accordance to appropriate regulations and laws.

Signal Word: **Danger**



This product can be a skin and eye sensitizer. The material should be washed from skin or flushed from eyes immediately. Contaminated clothing should be removed. Wear proper protective equipment. Any other acute toxicological information can be found in section 11.

Approximately 2% of the population can develop skin sensitivity with increasing inflammation and allergic reactions with repeated exposure.

### Section 3: Hazards Identification

Chemical Name	CAS number	Weight Concentration %
Diglycidyl Ether of Bisphenol A	25068-38-6	40.00% - 50.00%
Titanium Dioxide Colorant	13463-67-7	20.00% - 30.00%
REACTIVE DILUENT	26761-45-5	10.00% - 20.00%
Microcrystalline silica 98.5-99.0%	14808-60-7	5.00% - 10.00%

### Section 4: First Aid Measures

Move the exposed person to fresh air. If vapors are still present the rescuer should wear the appropriate mask. If breathing is irregular or arrest occurs use artificial respiration by trained personnel. Loosen tight fitting clothing. Get medical aid immediately.

Immediately flush eyes with plenty of water for at least 15 minutes. Regularly lift upper and lower eyelids during flushing. Remove contact lenses. Get medical aid.

Flush contaminated skin with water. Remove contaminated clothes, avoiding skin contact while doing so. Get medical attention. Clean contaminated shoes.

Wash mouth out thoroughly. Do not induce vomiting unless directed by medical personnel. Get medical attention.

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been inhaled or ingested.

### Section 5: Fire Fighting Measures

Flash Point: 127 C (261 F)

LEL:

UEL:

For flammable liquid: Can burst from pressure if in sealed container and heated, with risk of subsequent explosion. Vapors are heavier than air, can spray. Use Dry Chemical, CO<sub>2</sub>, water spray (fog), or foam. Do not use water jet.

Isolate scene removing persons not trained if there is a fire. Move containers from fire area if there is no risk. Use water spray to keep fire exposed containers cool.

Decomposition products may include the following materials: Carbon Oxides.

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus.

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. Do not use water jet.

### Section 6: Accidental Release Measures

No action should be taken with untrained personnel. Evacuate surrounding areas. Do not touch or walk through spill. Shut off all ignition sources. Provide fire extinguishers.

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble, or absorb with inert dry material and place in a container.

Stop leak if without risk. Move containers from area. Approach from upwind. Prevent run off to water source, basements, sewers, or confined areas. Clean up spill.

### Section 7: Handling and Storage

Use appropriate personal protective equipment. No eating, drinking, or smoking in areas of use. Persons with a history of skin sensitization should not be exposed.

Store in designated flammable liquid storage areas. Protect from direct sunlight in dry, cool ventilated areas. Keep food and drink away from area. Eliminate all ignition sources.

Do not use unlabeled containers. Use appropriate containment.

### Section 8: Exposure Controls/ Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
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Diglycidyl Ether of Bisphenol A 25068-38-6	Not Established	Not Established	Not Established
Titanium Dioxide Colorant 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established
REACTIVE DILUENT 26761-45-5	Not Established	Not Established	Not Established
Microcrystalline 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)

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to meet exposure to airborne cotamir  
 Ensure adequate ventilation by standard emmission testing procedures. Use appropriate respiratory equipment when needed.  
 Assure safety training of operators in regards to handling liquids and vapors. Follow local regulatory rules of exposure control using air purifying or air s  
 Use appropriate protective equipment according to OSHA and NAFTA standards and labeling. Ensure eye wash stations and safety showers are availab  
 Wash contaminated gear and clothing before reuse.

**Section 9: Physical and Chemical Properties**

<p><b>Viscosity:</b> N/A</p> <p><b>Appearance:</b> N/A</p> <p><b>Vapor Pressure:</b> 0.036 mmHg</p> <p><b>Vapor Density:</b> N/A</p> <p><b>DENSITY</b> 11.00</p> <p><b>Freezing point:</b> N/A</p> <p><b>Boiling range:</b> 251°C</p> <p><b>Evaporation rate:</b> N/A</p> <p><b>Explosive Limits:</b> N/A</p> <p><b>Autoignition temperature:</b> N/A</p>	<p><b>Coating VOC Lb/Gal</b> 0.00</p> <p><b>Odor:</b> N/A</p> <p><b>Odor threshold:</b> N/A</p> <p><b>pH:</b> N/A</p> <p><b>Melting point:</b> N/A</p> <p><b>Solubility:</b> N/A</p> <p><b>Flash point:</b> 261 F, 127 C</p> <p><b>Flammability:</b> N/A</p> <p><b>Partition coefficient (n- N/A octanol/water):</b></p> <p><b>Decomposition temperature:</b> N/A</p>
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**Section 10: Stability and Reactivity**

These materials are stable. Under normal conditions of storage and use hazardous reactions or polymerization will not occur.  
 Avoid all source of ignitions, sparks or flames. Do not allow vapor to accumulate in low lying areas.

STABLE

Do not expose to strong oxidizing agents, strong acids, or alapahtic amines.

Under normal use, no hazardous decomposition products are produced.

Hazardous polymerization will not occur.

**Section 11: Toxicological Information**

**Mixture Toxicity**

Oral Toxicity LD50: 4,295mg/kg  
 Dermal Toxicity LD50: 449mg/kg

Routes of Entry:

Exposure to this material may affect the following organs:

**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>
14808-60-7	Microcrystalline silica 98.5-99.0%	5 to 10%	Microcrystalline 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

**Section 12: Ecological Information**

No known significant effects or critical hazards.

**Component Ecotoxicity**

REACTIVE DILUENT	96 Hr LC50 Oncorhynchus mykiss: 5 mg/L [semi-static] 48 Hr EC50 Daphnia magna: 4.8 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: 3.5 mg/L
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**Section 13: Disposal Considerations**

Minimize the generation of waste whenever possible. Dispose by license waste disposal contractor. Comply with local, regional, and federal disposal regu

**Section 14: Transport Information**

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

**Section 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:

- 14808-60-7 Microcrystalline silica 98.5-99.0% 5 to 10 %
- 13463-67-7 Titanium Dioxide Colorant 20 to 30 %

HAZARDOUS AIR POLLUTANTS  
- None

HAZARDOUS SUBSTANCE/CHEMICALS/POLLUTANTS  
- None

MASSACHUSETTS RIGHT TO KNOW  
14808-60-7 Microcrystalline silica 98.5-99.0% 5 to 10 %  
13463-67-7 Titanium Dioxide Colorant 20 to 30 %

NEW JERSEY RIGHT TO KNOW  
14808-60-7 Microcrystalline silica 98.5-99.0% 5 to 10 %

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

PENNSYLVANIA RIGHT TO KNOW

14808-60-7 Microcrystalline silica 98.5-99.0% 5 to 10 %  
13463-67-7 Titanium Dioxide Colorant 20 to 30 %

- None

CHEMICAL LIST FOR SARA 311

- None

14808-60-7 Microcrystalline silica 98.5-99.0%

CHEMICAL LIST FOR SARA 313

- None

Country Regulation All Components Listed

EU Risk Phrases

Safety Phrase

- None

**Section 16: Other Information**

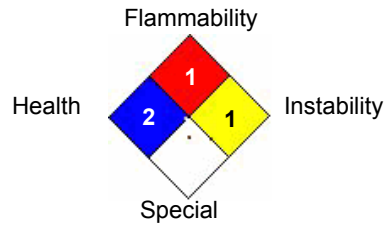
HMIS and NAFTA rating are on a 0 to 4 rating scale with 0 minimal hazard, and 4 represent significant danger or hazard.

**Hazardous Material Information System (HMIS)**

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		1
PERSONAL PROTECTION		G

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

**National Fire Protection Association (NFPA)**



The information provided herein was believed by Induron Protective Coating to be accurate and reliable, but the user is responsible to comply with all

Reviewer Revision

Date Prepared: 9/26/2016

# SAFETY DATA SHEET

## Section 1: Manufacturer's Identification

Product Name: PERMA-CLEAN 100 EPOXY ACTIVATOR Product Code: Q-4165  
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:

Oral Toxicity	Acute Tox. 4	Oral>300+<=2000mg/kg
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Carcinogen	1A	Known Human Carcinogen Based on human evidence

### GHS Hazards

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H350	May cause cancer

### GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
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
P285	In case of inadequate ventilation wear respiratory protection
P310	Immediately call a POISON CENTER or doctor/physician
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+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352	IF ON SKIN: Wash with soap and water
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
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
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.

**Signal Word: Danger**



**Section 3 : Hazards Identification**

Chemical Name	CAS number	Weight Concentration %
Microcrystalline silica 98.5-99.0%	14808-60-7	20.00% - 30.00%
Modified Polyamine	1477-55-0	10.00% - 20.00%
Benzyl Alcohol	100-51-6	10.00% - 20.00%
Titanium Dioxide Colorant	13463-67-7	10.00% - 20.00%
2,4,6 TRIDIMETHLYAMINOMETHYLPHENOL	90-72-2	1.00% - 5.00%

**Section 4: First Aid Measures**

Remove to fresh air, seek medical attention.  
Immediately flush eyes with water for at least 15 min. Seek medical attention.  
Immediately washes with soap and water. Remove contaminated clothing and laundry before reuse. Destroy contaminated shoes. Seek medical attention.  
Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to unconscious personnel. Seek immediate medical attention.  
Allergies, eczema, or skin conditions can be aggravated by this product.

**Section 5: Fire Fighting Measure:**

Flash Point: 98 C (208 F)

LEL: 1.00

UEL: 13.00

Carbon dioxide, foam, dry chemical, water spray.

Decomposition and combustion products may be toxic

Self contained breathing apparatus

**Section 6: Accidental Release Measures**

Absorb onto sand or other absorbent material. Shovel into closed container for disposal. Flush contaminated area with water.

**Section 7: Handling and Storage**

Causes sever eye irritation and may cause eye burns. Can cause skin irritation.  
May be harmful if swallowed. Avoid vapor or mist. Avoid skin contact. Wash thoroughly after handling.. Overexposure can have effects on nervous system.  
Store in closed containers.

**Section 8: Exposure Controls/ Personal Protection**

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Microcrystalline 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)
Modified Polyamine 1477-55-0	Not Established	0.1 mg/m3 Ceiling	NIOSH: 0.1 mg/m3 Ceiling
Benzyl Alcohol 100-51-6	Not Established	Not Established	Not Established
Titanium Dioxide Colorant 13463-67-7	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established
2,4,6 TRIDIMETHLYAMINOMETH YLPHENOL 90-72-2	Not Established	Not Established	Not Established

Good general mechanical ventilation and local exhaust.

Assure personnel safety training.

Wear protective equipment to prevent exposure and personal contact.

Wear impervious gloves

Use NIOSH approved vapor respirator if required.

Wear splash proof goggles.

Wash cloths before reuse. Dispose of contaminated shoes.

### Section 9: Physical and Chemical Properties

<p><b>Viscosity:</b> N/A</p> <p><b>Appearance:</b> N/A</p> <p><b>Vapor Pressure:</b> 0.049 mmHg</p> <p><b>Vapor Density:</b> 3.7</p> <p><b>DENSITY</b> 10.09</p> <p><b>Freezing point:</b> N/A</p> <p><b>Boiling range:</b> 205°C</p> <p><b>Evaporation rate:</b> N/A</p> <p><b>Explosive Limits:</b> N/A</p> <p><b>Autoignition temperature:</b> N/A</p>	<p><b>Coating VOC Lb/Gal</b> 0.22</p> <p><b>Odor:</b> N/A</p> <p><b>Odor threshold:</b> N/A</p> <p><b>pH:</b> N/A</p> <p><b>Melting point:</b> N/A</p> <p><b>Solubility:</b> N/A</p> <p><b>Flash point:</b> 208 F, 98 C</p> <p><b>Flammability:</b> N/A</p> <p><b>Partition coefficient (n-octanol/water):</b> N/A</p> <p><b>Decomposition temperature:</b> N/A</p>
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### Section 10: Stability and Reactivity

These materials are stable. Under normal conditions of storage and use hazardous reactions or polymerization will not occur.

Avoid all source of ignitions, sparks or flames. Do not allow vapor to accumulate in low lying areas.

STABLE

Do not expose to strong oxidizing agents or strong acids.

Under normal use, no hazardous decomposition products are produced.

Hazardous polymerization will not occur.

### Section 11: Toxicological Information

#### Mixture Toxicity



Oral Toxicity LD50: 1,097mg/kg  
Inhalation Toxicity LC50: 56mg/L

Routes of Entry:

**Ingestion**

Exposure to this material may affect the following organs:

**Eyes      Kidneys      Liver      Lungs      Skin      Respiratory System**

**Effects of Overexposure**

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
14808-60-7	Microcrystalline silica 98.5-99.0%	20 to 30%	Microcrystalline silica 98.5-99.0%: NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed
13463-67-7	Titanium Dioxide Colorant	10 to 20%	Titanium Dioxide Colorant: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

**Section 12: Ecological Information**

None available.

**Component Ecotoxicity**

Benzyl Alcohol      96 Hr LC50 Pimephales promelas: 460 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 10 mg/L [static]  
48 Hr EC50 water flea: 23 mg/L

**Section 13: Disposal Considerations**

Dispose in accordance with federal, state, and local regulations.

**Section 14: Transport Information**

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

**Section 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:

- 13463-67-7 Titanium Dioxide Colorant 10 to 20 %
- 14808-60-7 Microcrystalline silica 98.5-99.0% 20 to 30 %

**MASSACHUSETTS RIGHT TO KNOW**

- 13463-67-7 Titanium Dioxide Colorant 10 to 20 %
- 100-51-6 Benzyl Alcohol 10 to 20 %
- 1477-55-0 Modified Polyamine 10 to 20 %
- 14808-60-7 Microcrystalline silica 98.5-99.0% 20 to 30 %

**NEW JERSEY RIGHT TO KNOW**

- 13463-67-7 Titanium Dioxide Colorant 10 to 20 %
- 1477-55-0 Modified Polyamine 10 to 20 %
- 14808-60-7 Microcrystalline silica 98.5-99.0% 20 to 30 %

**PENNSYLVANIA RIGHT TO KNOW**

- 13463-67-7 Titanium Dioxide Colorant 10 to 20 %
- 100-51-6 Benzyl Alcohol 10 to 20 %
- 1477-55-0 Modified Polyamine 10 to 20 %
- 14808-60-7 Microcrystalline silica 98.5-99.0% 20 to 30 %

**CHEMICAL LIST FOR SARA 311/312**

- 100-51-6 Benzyl Alcohol
- 14808-60-7 Microcrystalline silica 98.5-99.0%

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
<b><u>EU Risk Phrases</u></b>		
<b><u>Safety Phrase</u></b>		

- None

**Section 16: Other Information**

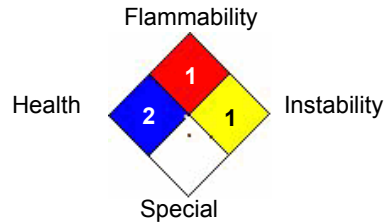
HMIS and NAFTA rating are on a 0 to 4 rating scale with 0 minimal hazard, and 4 represent significant danger or hazard.

**Hazardous Material Information System (HMIS)**

<b>HEALTH</b>	*	<b>2</b>
<b>FLAMMABILITY</b>		<b>1</b>
<b>PHYSICAL HAZARD</b>		<b>1</b>
<b>PERSONAL PROTECTION</b>		<b>G</b>

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

**National Fire Protection Association (NFPA)**



The information provided herein was believed by Induron Protective Coating to be accurate and reliable, but the user is responsible to comply with all laws and procedures whether included or not. Induron makes no warranty expressed or implied concerning the accuracy of the information except the product will comply with Induron specifications.

Reviewer Revision

Date Prepared: 9/28/2016