SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: INDURAZINC DF67 Product Code: H4-7910

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. 3	Gases>500+<=2500ppm, Vapors>2+<=10mg/l, Dusts&mists>0.5+<=1mg/l
Skin corrosive	3	Reversible adverse effects in dermal tissue, Draize score: >= 1.5 < 2.3
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1B	Presumed, Based on experimental animals

GHS Hazards

H226	Flammable liquid and vapour.
H316	Causes mild skin irritation
H317	May cause an allergic skin reaction
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
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.
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
P311	Call a POISON CENTER or doctor/physician
P321	Wash contaminated skin, follow Physcian's instructions for treatment.
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+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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
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/physcian.
P370+P378	In case of fire: Use CO2, water spray, foam, or dry chemical to extinguish.
P405	Store locked up
P403+P233	Store in a well ventilated place. Keep container tightly closed
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 %
Microcrystaline silica 98.5-99.0%	14808-60-7	10.00% - 20.00%
4,4'-Methylenediphenyl diisocyanate	101-68-8	1.00% - 5.00%
Mica	12001-26-2	1.00% - 5.00%
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	1.00% - 5.00%
Benzene, 1,1'-methylenebis[isocyanato-	26447-40-5	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: 27 C (81 F)

LEL: UEL:

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
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)

4,4'-Methylenediphenyl diisocyanate 101-68-8	Not Established	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	NIOSH: 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate); 0.05 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m3 Ceiling (10 min)
Mica 12001-26-2	Not Established	3 mg/m3 TWA (respirable fraction)	NIOSH: 3 mg/m3 TWA (containing <1% Quartz, respirable dust)
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	Not Established	Not Established	Not Established
Benzene, 1,1'-methylenebis [isocyanato- 26447-40-5	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.

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:

Viscosity: N/A	**Coating VOC Lb/Gal** 3.73
Appearance: N/A	**Odor:** N/A
Vapor Pressure: 5.4 mmHg	**Odor threshold:** N/A
Vapor Density: 3.5	**pH:** N/A
DENSITY 9.15	**Melting point:** N/A
Freezing point: N/A	**Solubility:** N/A
Boiling range: N/A	**Flash point:** 81 F,27 C
Evaporation rate: N/A	**Flammability:** N/A
Explosive Limits: N/A	**Partition coefficient (n-octanol/water):** N/A
Autoignition temperature: N/A	**Decomposition temperature:** 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.

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 4,681mg/kg
Inhalation Toxicity LC50: 6mg/L

Routes of Entry: Skin, Eyes, Breathing

Ingestion

Exposure to this material may affect the following organs:Skin, lungs, eyes, internal 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%	10 to 20%	Microcrystaline silica 98.5-99.0%: NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed

Section 12 - Ecological Information

Component Ecotoxicity

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

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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:

14808-60-7 Microcrystaline silica 98.5-99.0% 10 to 20 %

HAZARDOUS AIR POLLUTANTS

101-68-8 4,4'-Methylenediphenyl diisocyanate

MASSACHUSETTS RIGHT TO KNOW

26447-40-5 Benzene, 1,1'-methylenebis[isocyanato- 0.1 to 1.0 %
12001-26-2 Mica 1 to 5 %
101-68-8 4,4'-Methylenediphenyl diisocyanate 1 to 5 %
14808-60-7 Microcrystaline silica 98.5-99.0% 10 to 20 %

NEW JERSEY RIGHT TO KNOW

26447-40-5 Benzene, 1,1'-methylenebis[isocyanato- 0.1 to 1.0 %
9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester 1 to 5 %
12001-26-2 Mica 1 to 5 %
14808-60-7 Microcrystaline silica 98.5-99.0% 10 to 20 %

PENNSYLVANIA RIGHT TO KNOW

12001-26-2 Mica 1 to 5 %
101-68-8 4,4'-Methylenediphenyl diisocyanate 1 to 5 %
14808-60-7 Microcrystaline silica 98.5-99.0% 10 to 20 %

CHEMICAL LIST FOR SARA 311/312

14808-60-7 Microcrystaline silica 98.5-99.0%

Country **Regulation** **All Components Listed**

EU Risk Phrases

Safety Phrase

- None

16: OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	*	2
FLAMMABILITY		3
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)