SAFETY DATA SHEET

SECTION 1- MANUFACTURER'S IDENTIFICATION

Product Name: INDURATAR MC Product Code: Q-2900

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	Flash point < 23°C and initial boiling point > 35°C (95°F)
Inhalation Toxicity	Acute Tox. 3	Gases>500+<=2500ppm, Vapors>2+<=10mg/l, Dusts&mists>0.5+<=1mg/l
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
Respiratory sensitizer	1	Respiratory sensitizer
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	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1B	Presumed, Based on experimental animals

GHS Hazards

H225	Highly flammable
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H331	Toxic if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
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.
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.
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
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
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
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 %
High Temperature Coal Tar Pitch	65996-93-2	10.00% - 20.00%
Talc (hydrous magnesium silicate)	14807-96-6	5.00% - 10.00%
Mixed Xylenes	1330-20-7	5.00% - 10.00%
* 1,2,4-TRIMETHYL BENZENE	95-63-6	5.00% - 10.00%
4-METHYL-2-PENTANONE	108-10-1	1.00% - 5.00%
4,4'-Methylenediphenyl diisocyanate	101-68-8	1.00% - 5.00%
Benzene,1,2,5-trimethyl	526-73-8	1.00% - 5.00%
Benzene,1,3,5-trimethyl	108-67-8	1.00% - 5.00%
2-ETHYL BENZENE	100-41-4	1.00% - 5.00%
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	1.00% - 5.00%
Cumene	98-82-8	0.10% - 1.00%
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: 16 C (61 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 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
High Temperature Coal Tar Pitch 65996-93-2	0.2 mg/m3 TWA (benzene soluble fraction)	0.2 mg/m3 TWA (as benzene soluble aerosol)	NIOSH: 0.1 mg/m3 TWA (Cyclohexane-extractable fraction)
Talc (hydrous magnesium silicate) 14807-96-6	Not Established	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	NIOSH: 2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust)
Mixed Xylenes 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established
* 1,2,4-TRIMETHYL BENZENE 95-63-6	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
4-METHYL-2-PENTANONE 108-10-1	100 ppm TWA; 410 mg/m3 TWA	75 ppm STEL 20 ppm TWA	NIOSH: 50 ppm TWA; 205 mg/m3 TWA 75 ppm STEL; 300 mg/m3 STEL
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)
Benzene,1,2,5-trimethyl 526-73-8	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
Benzene,1,3,5-trimethyl 108-67-8	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
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
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	Not Established	Not Established	Not Established
Cumene 98-82-8	50 ppm TWA; 245 mg/m3 TWA	50 ppm TWA	NIOSH: 50 ppm TWA; 245 mg/m3 TWA

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**	2.75
Appearance:	N/A	**Odor:**	N/A
Vapor Pressure:	11.6 mmHg	**Odor threshold:**	N/A
Vapor Density:	4.1	**pH:**	N/A
DENSITY	11.86	**Melting point:**	N/A
Freezing point:	N/A	**Solubility:**	N/A
Boiling range:	114°C	**Flash point:**	61 F,16 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.

Warning

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Mixture Toxicity

Inhalation Toxicity LC50: 9mg/L

Routes of Entry: Skin, Eyes, Breathing

Inhalation **Skin Contact** **Eye Contact** **Ingestion**

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

Blood **Eyes** **Kidneys** **Liver** **Central Nervous System** **Skin** **Cardiovascular System** **Bladder** **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
65996-93-2	High Temperature Coal Tar Pitch	10 to 20%	High Temperature Coal Tar Pitch: NIOSH: potential occupational carcinogen IARC: Human carcinogen OSHA: listed EU REACH: Present (Will be deleted on April 1, 2016 according to Regulation (EU) No 317/2014) EU REACH: Present (Applies from April 1, 2016; The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 degree Celsius to180 degrees Celsius (86F to 356F). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.)
100-41-4	2-ETHYL BENZENE	1 to 5%	2-ETHYL BENZENE: IARC: Possible human carcinogen OSHA: listed
108-10-1	4-METHYL-2-PENTANONE	1 to 5%	4-METHYL-2-PENTANONE: IARC: Possible human carcinogen OSHA: listed
98-82-8	Cumene	.1 to 1.0%	Cumene: IARC: Possible human carcinogen OSHA: listed

Section 12 - Ecological Information

Component Ecotoxicity

Talc (hydrous magnesium silicate)	96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]
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

* 1,2,4-TRIMETHYL BENZENE	96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 6.14 mg/L
4-METHYL-2-PENTANONE	96 Hr LC50 Pimephales promelas: 496 - 514 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 170 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: 400 mg/L
Benzene,1,3,5-trimethyl	96 Hr LC50 Pimephales promelas: 3.48 mg/L
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 subcapitata: 1.7 - 7.6 mg/L [static]
Cumene	96 Hr LC50 Pimephales promelas: 6.04 - 6.61 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 4.8 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.7 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 5.1 mg/L [semi-static] 48 Hr EC50 Daphnia magna: 0.6 mg/L; 48 Hr EC50 Daphnia magna: 7.9 - 14.1 mg/L [Static] 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 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	II	3
IATA	PAINT	1263	II	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:

98-82-8 Cumene 0.1 to 1.0 %
100-41-4 2-ETHYL BENZENE 1 to 5 %
108-10-1 4-METHYL-2-PENTANONE 1 to 5 %

HAZARDOUS AIR POLLUTANTS

98-82-8 Cumene
100-41-4 2-ETHYL BENZENE

101-68-8 4,4'-Methylenediphenyl diisocyanate
108-10-1 4-METHYL-2-PENTANONE
1330-20-7 Mixed Xylenes

HAZARDOUS SUBSTANCE/CHEMICALS/POLLUTANTS
65996-93-2 High Temperature Coal Tar Pitch

MASSACHUSETTS RIGHT TO KNOW
26447-40-5 Benzene, 1,1'-methylenebis[isocyanato- 0.1 to 1.0 %
98-82-8 Cumene 0.1 to 1.0 %
100-41-4 2-ETHYL BENZENE 1 to 5 %
108-67-8 Benzene,1,3,5-trimethyl 1 to 5 %
101-68-8 4,4'-Methylenediphenyl diisocyanate 1 to 5 %
108-10-1 4-METHYL-2-PENTANONE 1 to 5 %
95-63-6 * 1,2,4-TRIMETHYL BENZENE 5 to 10 %
1330-20-7 Mixed Xylenes 5 to 10 %
14807-96-6 Talc (hydrous magnesium silicate) 5 to 10 %
65996-93-2 High Temperature Coal Tar Pitch 10 to 20 %

NEW JERSEY RIGHT TO KNOW
26447-40-5 Benzene, 1,1'-methylenebis[isocyanato- 0.1 to 1.0 %
98-82-8 Cumene 0.1 to 1.0 %
9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester 1 to 5 %
100-41-4 2-ETHYL BENZENE 1 to 5 %
108-10-1 4-METHYL-2-PENTANONE 1 to 5 %
95-63-6 * 1,2,4-TRIMETHYL BENZENE 5 to 10 %
1330-20-7 Mixed Xylenes 5 to 10 %
14807-96-6 Talc (hydrous magnesium silicate) 5 to 10 %
65996-93-2 High Temperature Coal Tar Pitch 10 to 20 %

PENNSYLVANIA RIGHT TO KNOW
98-82-8 Cumene 0.1 to 1.0 %
100-41-4 2-ETHYL BENZENE 1 to 5 %
101-68-8 4,4'-Methylenediphenyl diisocyanate 1 to 5 %
108-10-1 4-METHYL-2-PENTANONE 1 to 5 %
95-63-6 * 1,2,4-TRIMETHYL BENZENE 5 to 10 %
1330-20-7 Mixed Xylenes 5 to 10 %
14807-96-6 Talc (hydrous magnesium silicate) 5 to 10 %
65996-93-2 High Temperature Coal Tar Pitch 10 to 20 %

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

98-82-8 Cumene
526-73-8 Benzene,1,2,5-trimethyl
1330-20-7 Mixed Xylenes
65996-93-2 High Temperature Coal Tar Pitch

CHEMICAL LIST FOR SARA 313
100-41-4 2-ETHYL BENZENE
108-10-1 4-METHYL-2-PENTANONE
95-63-6 * 1,2,4-TRIMETHYL BENZENE
1330-20-7 Mixed Xylenes

Country	Regulation	All Components Listed

EU Risk Phrases

Safety Phrase

- None

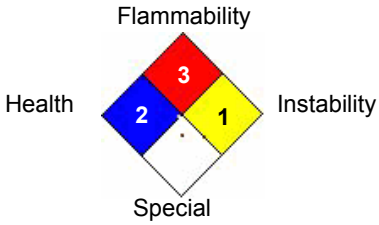
16: OTHER INFORMATION

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)



Reviewer Revision

Date Prepared: 9/22/2016