

Dalton, GA

Hickory, NC

Mount Airy, NC

Salt Lake City, UT

Section 1: Identification

Product Identifier

Trade Name: R-72-004 Dark Gray
Chemical Name: Urethane Coating
Recommended Use: Roof Coating
Restrictions on Use: For Industrial Use Only

Chemical Manufacturer Information

Name: NCFI Polyurethanes
Address: 1515 Carter St Mount Airy, NC 27030
Website: www.NCFI.com

Phone: (800) 346-8229
Fax: (336) 789-9586
Emergency Phone: CHEMTREC: 800-424-9300

Section 2: Hazard Identification

Classification of the substance or mixture:

<ul style="list-style-type: none"> Respiratory Sensitisation Category 1A Skin Sensitisation Category 1 	<ul style="list-style-type: none"> Carcinogenicity Category 2 Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2
<ul style="list-style-type: none"> Corrosion/Irritation Category 2 Serious Eye Damage/Eye Irritation Category 2A 	<ul style="list-style-type: none"> Flammable Liquid Category 3 Acute Toxicity - Inhalation Vapour Category 3

GHS Labeling:



Hazard Statements:

<ul style="list-style-type: none"> Flammable liquid and vapour. 	<ul style="list-style-type: none"> May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<ul style="list-style-type: none"> Causes skin irritation. 	<ul style="list-style-type: none"> May cause an allergic skin reaction.
<ul style="list-style-type: none"> Causes serious eye irritation. 	<ul style="list-style-type: none"> Suspected of causing cancer.
<ul style="list-style-type: none"> Toxic if inhaled. 	<ul style="list-style-type: none"> May cause damage to organs through prolonged or repeated exposure



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Precautionary Statements:	
• Do not breathe fume/gas/mist/vapors/spray	• Wear protective gloves/eye protection/face protection
• Keep away from heat, sparks, open flames and hot surfaces.	• Ground container and receiving equipment.
• No Smoking	• Use explosion-proof electrical, ventilating, and lighting equipment
• Take precautionary measures against static discharge	• Use only non-sparking tools.
• IF IN EYES: Rinse immediately with water for at least 15 minutes. Get medical attention immediately.	• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have a trained individual administer oxygen.
• IF ON SKIN: Wash with plenty of soap and water.	• IF INGESTED: Harmful if swallowed. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

Long-term (Chronic) Health Effects:

Carcinogenicity:

Cancer hazard: Contains Crystalline Silica which can cause cancer. Risk of cancer depends on duration and level of exposure to dust generated from sanding surfaces or spray mists.
Contains Titanium Dioxide which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence with respect to humans and sufficient evidence in experimental animals.

Inhalation:

Overexposure may cause lung damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and central nervous system damage.

Skin Contact:

Prolonged contact may cause an allergic skin reaction.

Section 3: Composition

Hazardous Components

Type of product: Mixture

<u>CAS#</u>	<u>Weight %</u>	<u>Name</u>
9057-91-4	10 – 30	Polyisocyanate Resin
8052-41-3	5 - 10	Stoddard solvent
140921-24-0	3 - 7	Oxazolidine Hardener
13463-67-7	1 - 5	Titanium dioxide
14808-60-7	1 - 5	Quartz (Silica-Crystalline)
124-17-4	3 – 7	Butyl carbitol acetate 3 - 7
112945-52-5	1 – 5	Fumed silica
5989-27-5	0.5 - 1.5	(d)-Limonene
26471-62-5	0.1 - 1	Toluene diisocyanate
101-68-8	0.1 - 1	4,4-Diphenylmethane diisocyanate
1333-86-4	0.1 - 1	Carbon Black



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Section 4: First Aid Measures

Inhalation:	Move to fresh air if symptoms develop. If breathing is difficult, give oxygen and call physician.
Eye Contact:	Flush with water for at least 15 minutes. See a physician if irritation develops.
Ingestion:	Do not induce vomiting- consult physician with this SDS
Most Important symptoms and effects, acute and delayed:	May cause skin or eye irritation upon contact. Avoid breathing vapors.
Indication of immediate medical attention and special treatment, if applicable:	Not Available
Skin Contact:	Wash with soap and water at first opportunity. Remove contaminated clothing and shoes. Wash or clean clothing before reuse.

Section 5: Fire-Fighting Measures

Suitable extinguishing media:	Use alcohol resistant foam, CO ₂ , dry chemical or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
Unsuitable extinguishing media:	N/A
Special hazards arising from the chemical:	Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Containers may explode in heat of fire.
Precautions for fire-fighters:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including the material spilled, the quantity of the spill and the area in which the spill occurred. Also, consider the expertise of associates in the area near the spill. Never exceed any occupational exposure limits.
Methods and material for containment and cleanup:	Remove or extinguish ignition or combustion sources. Do not allow smoking in the area. Contain spill. Dike with suitable absorbent material. Waste material should be gathered and stored in sealed containers and disposed of under conditions which meet federal, state, and local environmental regulations. Wash area with detergent and water.

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Section 7: Handling and Storage

Precautions for safe handling:	Harmful or irritating material. Avoid contacting and breathing the material. Use only in a well-ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Wash thoroughly after handling. Do not get in eyes or on skin or clothing. Ground and bond containers when transferring material. Containers with product residue can be dangerous.
Conditions for safe storage, including any incompatibilities:	Keep tightly sealed. Store in a cool, dry place. Keep away from sources of ignition.

Section 8: Exposure Controls and PPE

Exposure Limits

Component:	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL
Stoddard solvent	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm TWA; 572 mg/m ³ TWA	
Titanium dioxide	15 mg/m ³ TWA (total dust)	10 mg/m ³ TWA	
Quartz (Silica-Crystalline)	see Table Z-3	0.05 mg/m ³ TWA (respirable fraction)	
Fumed Silica (Particles not otherwise regulated)	50 mppcf (15mg/m ³) TWA Total Dust; 15 mppcf (5mg/m ³) TWA Respirable fraction		
Toluene diisocyanate		0.005 ppm TWA	0.02 ppm
Carbon Black	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA	

Exposure Controls

Engineering Measures:	Use local exhaust ventilation or other engineering controls to minimize exposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910.
Respiratory Protection:	General or local exhaust ventilation is the preferred means of protection. In cases where ventilation is inadequate, respiratory protection may be required to avoid overexposure. Follow respirator manufacturer's directions for use.
Hand, eye, skin, body protection:	Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Eye wash system and showers should be available. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking and when leaving work. Wear clothing suitable to prevent skin contact.

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Section 9: Physical and Chemical Properties

Basic chemical and physical properties

Appearance:	Liquid	Density:	10.63 – 10.83 lbs/gal
Color:	Gray	Upper/lower flammability or explosive limits:	10.7/0.8
Odor:	Hydrocarbon	Vapor pressure:	68 F (0.52 mm Hg)
Odor Threshold:	No data available	Vapor density:	7.00 (air = 1)
pH:	No data available	Relative density:	2.400
Melting Point/Freezing Point (°F/°C):	No data available/no data available	Solubility(ies):	Reacts slowly in water
Viscosity:	105 - 120 KU	Partition coefficient (n-octanol/water):	No data available
Boiling pt/boiling range:	350.0 -456.0	Volatiles, % by Volume (calc):	23.24
Flash point:	108°F / 42°C	Volatiles, % by Weight (calc):	15.41
Evaporation rate:	0.05	Solubility(ies):	Reacts slowly in water
Auto-ignition Temperature:	No data available	Volatile Organic Chemicals (g/L)	
Decomposition Temperature:	No data available	(Regulatory, Calculated)	197.43
Flammability (solid/gas):	N/A	(Actual, Calculated)	197.40

Section 10: Stability and Reactivity

Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	N/A
Conditions to avoid:	Temperatures above flash point in combination with ignition sources. Contamination. Elevated temperatures. Contact with water.
Incompatible materials:	Oxidizing agents, Metals, Acids, Amines, Caustics (bases, alkalis), Water, Alcohols.
Hazardous decomposition products:	Sulfur containing gases, carbon dioxide, carbon monoxide

Section 11: Toxicological Information

Routes of Exposure: Eye contact
Inhalation
Skin contact
Ingestion

Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

Inhalation Toxicity Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea.

Skin Contact Can cause moderate skin irritation. May cause allergic skin reaction.

Eye Contact Causes eye irritation.

Ingestion Toxicity Harmful if swallowed. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.



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Long-Term (Chronic) Health Effects

Carcinogenicity

Contains Titanium Dioxide which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence with respect to humans and sufficient evidence in experimental animals.

Cancer hazard: Contains Crystalline Silica, which can cause cancer. Risk of cancer depends on duration and level of exposure to dust generated from sanding surfaces or spray mists.

Possible cancer hazard: contains toluene diisocyanate which may cause cancer. Risk of cancer depends on duration and level of exposure to dust generated from sanding surfaces or spray mists.

Inhalation

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intention misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Overexposure may cause lung damage.

Skin Contact

Prolonged contact may cause an allergic skin reaction.

Product Toxicology Data

Oral Acute Toxicity Estimate (ATE) 2,487.38 mg/kg

Dermal Acute Toxicity Estimate (ATE) 5,414.58 mg/kg

Component Toxicology Data:

Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 1,3-diisocyanatomethylbenzene and alpha.-hydro-omega-hydroxypoly [oxy(methyl-1,2- ethanediyl)]	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	Inhalation LC50 (4h) Rat > 20.00 mg/L
Stoddard solvent	Oral LD50 Rat > 5 g/kg		Inhalation LC50 Rat > 6.10 mg/L
Titanium dioxide	Oral LD50 Rat > 25,000 mg/kg	Dermal LD50 Rabbit > 10,000 mg/kg	Inhalation LC50 (4h) Rat > 6.82 mg/L
Quartz	Oral LD50 Rat > 22,500 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat > 20.00 mg/L
Butyl carbitol acetate	Oral LD50 Rat 6500 mg/kg	Dermal LD50 Rabbit 14,500 mg/kg	Inhalation LC50 (4h) Rat 72.50 mg/L
Fumed silica	Oral LD50 Rat > 1000 mg/kg		
(d)-Limonene	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	
Toluene diisocyanate	Oral LD50 Rat 6170 mg/kg	Dermal LD50 Rabbit > 16,000 mg/kg	Inhalation LC50 (4h) Rat 0.10 mg/L
Carbon Black	Oral LD50 Rat > 8000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	
Carcinogens:			
Titanium dioxide			IARC: 2B NTP: 1 OSHA:
Quartz			IARC: 1 NTP: 2 OSHA:
Toluene diisocyanate			IARC: 2B
Carbon Black			IARC: 2B

Section 12: Ecological Information

Ecotoxicity:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available

Toxicity data, if available, are listed in Section 11.



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Section 13: Disposal

Waste disposal:	Refer to other sections of this SDS to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.
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Section 14: Transport

UN number:	UN1263
UN Proper shipping name:	Paint
Transport Hazard class(es):	3
Packing group, if applicable:	III
Other:	Not regulated for non-bulk domestic ground shipments for packaging of 450 liters (119 gallons) or less (DOT 49CFR 173.150(f)).

Section 15: Regulatory

Inventory Status:	All components TSCA listed		
US Federal Regulations:		CAS #	%
SARA EHS Chemicals	Toluene Diisocyanate	26471-62-5	0.1 - 1
CERLA	Toluene Diisocyanate	26471-62-5	0.1 - 1
SARA 313	2-(2-Butoxyethoxy)ethyl acetate	124-17-4	3 - 7
	Toluene diisocyanate (mixed isomers)	26471-62-5	0.1 - 1
SARA 311/312	Health (Acute): Y Health (chronic): Y Fire (Flammable): Y Pressure: N Reactivity: Y		
US State Regulations:			
California Prop 65 Chemicals	Cancer	CAS #	%
	Titanium dioxide	13463-67-7	1 - 5
	Crystalline Silica	14808-60-7	1 - 5
	Toluene Diisocyanate	26471-62-5	0.1 - 1
	Carbon Black	1333-86-4	0.1 - 1
	Cumene	98-82-8	0.01 - 0.1
	Benzene	71-43-2	0.001 - 0.01
	Arsenic	7440-38-2	< 10 ppb
	Lead	7439-92-1	< 10 ppb
	Nickel	7440-02-0	< 10 ppb

	Reproductive		
	Methyl Alcohol	67-56-1	0.001 – 0.010
	Benzene	71-43-2	0.001 – 0.01
	Lead	7439-92-1	< 10 ppb

Canadian Regulations:

CEPA DSL: The components of this product are listed on the Canadian Domestic Substances List.
WHMIS Hazard Class: B3 D2A



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Section 16: Other

MSDS Preparation Date:	09/3/2015
Revision Date:	

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