



**1 - PRODUCT and COMPANY INFORMATION**

**Company Info:** iCOAT Products, Inc. [www.icoatproducts.com](http://www.icoatproducts.com)  
**Company Address:** 1519 W. Grant St. Phoenix, AZ 85007, USA  
**Phone:** (602) 258-1114  
**Fax:** (602) 258-1119  
**CHEMTREC:** For emergencies in the US Call CHEMTREC: (800) 424-9300  
**Canutec:** In Canada, all CANUTEC: (613) 996-6666 (call collect)  
**MSDS Format:** According to ANSI Z400.1-2004

**Product Name:** CrackRX 98 or 100 (Part A)  
**Chemical Family:** Aliphatic Isocyanate

**HMIS Classification:** H F R PP  
2 2 1 H

**2 - COMPOSITION INFORMATION**

Ingredients / Components	CAS #	Vapor Pressure Mm Hg @ Temp	OSHA CLV	ACGIH TLV	WT %
* Diphenylmethane Diisocyanate	026447-40-5	.00004 @ 77° F	0.02ppm, 0.2mg/m3	0.005ppm	55-60
* Polymeric Diphenylmethane Diisocyanate	9016-87-9	0.000004 @ 49.08° F	0.02ppm, 0.2mg/m3	0.005ppm	25-30
* Aromatic Hydrocarbons	64742-94-5	5.20 @ 100° F	10ppm	.1 MG/M3 RDUST; 9495	<0.0003

\* INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372 (SEE SECTION 15 FOR MORE DETAILED INFORMATION).

**3 - HAZARDS IDENTIFICATION**

**Emergency Overview :** Irritant

**Potential Health Effects**

**Target Organs:**

**Skin:** Eye, Skin Contact, Inhalation.  
**Acute Skin:** Causes irritations with symptoms of reddening, itching and swelling. Persons previously sensitized can experience allergic reactions and symptoms of reddening, itching, and rash. Cured material is difficult to remove. Contact with isocyanates can cause discoloration.  
**Chronic Skin:** Prolonged irritation can cause reddening, swelling, rash, and in some cases, sensitization. Animal tests on isocyanates indicate that skin contact alone may lead to an allergic respiratory reaction.  
**Skin Absorption:** Material is absorbed through the skin and gives the same symptoms of inhalation and ingestion if sufficient amount is absorbed. Animal tests have indicated that respiratory sensitization may result from skin contact with isocyanates. Experience indicates that direct skin contact is the route of exposure most likely to cause sensitization.



<b>Eye:</b>	<b>Acute Eye:</b> Causes irritation and symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.
<b>Inhalation:</b>	Respiratory sensitizer. This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, cataracts, anemia, nasal damage, eye damage, central nervous system damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: cataracts, eye damage. <b>.Acute Inhalation:</b> Irritation of respiratory tract, sensitization, lung damage. <b>Chronic Inhalation:</b> Sensitization, lung damage.
<b>Ingestion:</b>	May cause irritation; symptoms may include abdominal pain, nausea, vomiting, and diarrhea. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: sweating, fever, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), lung irritation, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), pain in the abdomen, frequent or painful urination, confusion, blood abnormalities (breakage of red blood cells), kidney damage, lung damage, respiratory failure.
<b>Carinogenicity:</b>	NTP Carcinogen: Yes    IARC Monographs: Yes    OSHA Regulated: No
<b>Aggravation of Pre-Existing Conditions:</b>	Skin Allergies, Eczema, Asthma, Respiratory disorders. All applicants who are assigned to an isocyanate work area should undergo a pre-placement medical evaluation. A history of eczema or respiratory allergies such as hay fever, are possible reasons for medical exclusion from isocyanate areas. Applicants who have a history of adult asthma should be restricted from work with isocyanates. Applicants with a history of prior isocyanate sensitization should be excluded from further work with isocyanates. A comprehensive annual medical surveillance program should be instituted for all employees who are potentially exposed to diisocyanates. Once a worker has been diagnosed as sensitized to any isocyanate, no further exposure can be permitted. This material may aggravate the following disorders: respiratory tract, skin, lung (for example, asthma-like conditions), kidney, immune system, and eye. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with erythrocyte glucose-6-phosphate dehydrogenase deficiency are particularly susceptible to hemolytic agents and rapidly develop hemolytic anemia from ingestion or inhalation of this material (or a component).

## **4 -FIRST AID MEASURES**

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for 15 – 20 minutes. Use lukewarm water if possible. Use finger tips to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention.
<b>Skin Contact:</b>	Immediately wash skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists. For severe exposure, immediately get under safety shower and begin rinsing. After washing, cover affected skin with polyethylene glycol (300-500 molecular weight) and wash again immediately with soap and water to thoroughly remove polyethylene glycol and residual isocyanate. Repeat if necessary.
<b>Inhalation:</b>	If inhaled, remove to fresh air away from further exposure. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention immediately. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reaction can be life threatening.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Wash mouth out with water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

<b>Note to Physician:</b>	<b>Eyes:</b> Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. <b>Skin:</b> This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. <b>Ingestion:</b> Treat symptomatically. There is no specific antidote. Induced vomiting is contraindicated because of the irritating nature of the compound.
---------------------------	--



**Inhalation:** Treatment is essentially symptomatic. An individual having a derma or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

**Additional note to a Physician:** This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Inhalation or ingestion of high levels of this material (or a component) may cause a hemolytic reaction. Complications of acute intravascular hemolysis include anemia, leukocytosis, fever, hemoglobinuria, jaundice, renal insufficiency, and sometimes disturbances in liver function. Fats, for example, baby oil on the skin or ingested oil, facilitate absorption of naphthalene.

## **5 - FIRE FIGHTING MEASURES**

**Flash Point:** 128° F  
**Upper Flammable / Explosive Limit:** 6.0 (method used = TCC)  
**Lower Flammable / Explosive Limit:** 1.0 (method used = TCC)  
**Extinguishing Media:** **Small Fire:** Use dry chemical powder. **Large Fire:** Use water spray, fog or foam.  
**Special Firefighting Measures:** Do not use water jet.  
**Protective Equipment:** As in any fire, wear Self –Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.  
**Unusual Fire and Explosion Hazards:** Reacts slowly with wter to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures. Cool closed drums with water mist.  
**Static Discharge:** Material can accumulate static charges can cause an incendiary electrical discharge  
**Empty Containers:** “Empty” containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be drained, properly bunged and properly returned to a drum reconditioner, or properly disposed of.

### **NFPA Ratings:**

NFPA Health: 2  
NFPA Flammability: 2  
NFPA Reactivity: 1

## **6 - ACCIDENTAL RELEASE MEASURES**

**Personnel Precautions:** Use proper personal protective equipment as listed in Section 8. Evacuate non-emergency personnel. Isolate the area to prevent access. Remove ignition sources. Notify management. Control source of leak. Ventilate.  
**Environmental Precautions:** Avoid runoff into storm sewers, ditches and waterways.  
**Spill Cleanup Measures:** **Minor Spill:** Cover spill area with suitable absorbent material (kitty litter, Oil-dri™, etc.). Saturate absorbent material with neutralization solution (see formulas below) and mix. Wait 15 minutes. Collect material in open-head metal containers. Repeat application of decontamination solution (see formulas below), with scrubbing, followed by absorbent material until the surface is decontaminated. Check for residual surface contamination. Apply lid loosely and allow containers to vent for 72 hours to let carbon dioxide (co2) escape.

**Neutralization/Decontamination Solutions:**

1. Colorimetric Laboratories Inc. (CLI) decontamination solution.
2. A mixture of 75% water, 20% non-ionic surfactant (e.g. Poly-Tergent SL-62, Tergitol TMN-10) and 5% n-propanol.
3. A mixture of 80% water and 20% non-ionic surfactant (e.g. Poly-Tergent SL-62, Tergitol TMN-10).
4. a mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.
5. Mix equal amounts of the following to total two times the estimated spill volume: (1) mineral spirits 80%, VM&P napatha 15% and household detergent 5%; and (2) a 50/50 mixture of moneoethanolamine and water.

Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (< -1m/sec until fill pipe submerged to twice its diameter, then < -7 m/sec). splash filling. Do NOT use compressed air for



filling, discharging, or handling operations.

## **7 - HANDLING AND STORAGE**

- Handling:** Use with adequate ventilation. Avoid breathing vapors, mist or dust. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or mist. Avoid contact with skin and eyes. Do not breathe smoke gasses created by overheating or burning this material. Decomposition products can be highly toxic and irritating. Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard found in 29 CFR 1910.1200.
- Storage:** Store in a cool, dry place. Keep from freezing. Keep container tightly closed when not in use. Ideal storage temperature range is dependent on specific polymer due to viscosity and melting point differences between polymers. Use 25° C (77° F) to 30° C (86° F) as a guideline to most isocyanates for optimum storage temperature. If some isocyanates are stored at or below a temperature of 25° C (77° F), crystallization and settling of the isocyanate may occur. Storage in a cold warehouse can cause crystals to form. These crystals can settle to the bottom of the container. If crystals do form, they can be melted easily with moderate heat. It is suggested that a container size of a drum be warmed for 16-24 hours at a sufficient temperature to melt the crystals. When the crystals are melted, the container should be agitated by rolling or stirring, until the contents are homogenous. Since heated isocyanate will generate vapors more rapidly than product stored at 25° C (77° F), be sure to follow the precautions under the "Protection" section of the MSDS whenever opening a heated isocyanate container. Smoking in areas where this material is used should be strictly prohibited.
- Hygiene Practices:** Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust.

## **8 - EXPOSURE CONTROLS / PERSONAL PROTECTION – EXPOSURE GUIDELINES**

- Engineering Controls:** Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits whenever isocyanate is heated, sprayed, or aerosolized. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of personal protective equipment.
- Eye/Face Protection:** Wear ANSI approved protective glasses or chemical working goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166
- Skin Protection:** Impervious protective gloves (nitrile), chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.
- Respiratory Protection:** Airborne isocyanate concentrations greater than the ACGIH TLV-TWA or OSHA PEL-C can occur in inadequately ventilated environments when isocyanate is sprayed, aerosolized or heated. In such cases, respiratory protection must be worn. If conditions warrant, use a NIOSH approved air-purifying respirator with an organic vapor cartridge (OV/P100) or canister as set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). Self-contained breathing apparatus or supplied air respirator may also be used. Do not use a air purifying respirator should the airborne diisocyanate concentration levels be greater than 10 times the TLV or PEL. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
- Other Protective:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



## **9 - PHYSICAL and CHEMICAL PROPERTIES**

<b>Physical State Appearance:</b>	Liquid
<b>Odor:</b>	Hydrocarbon odor
<b>Boiling Point:</b>	343° F – 572° F
<b>Specific Gravity:</b>	1.112 (h <sub>2</sub> O = 1)
<b>Evaporation Rate:</b>	Slower than ether
<b>Vapor Density:</b>	Greater than 1 (Air = 1)
<b>Solubility in Water:</b>	Not soluble
<b>Flash Point:</b>	128° F
<b>Coating V.O.C.:</b>	1.68 lb/gal
<b>Material V.O.C.:</b>	1.68 lb/gal

## **10 - STABILITY and REACTIVITY**

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures. Contact with moisture, other materials that react with isocyanates, or temperatures below 350° F (177° C) may cause polymerization.
<b>Hazardous Polymerization:</b>	May occur at elevated temperatures in the presence of water, alkalies, tertiary amines and metal compounds.
<b>Conditions to Avoid:</b>	Avoid high temperatures and avoid freezing.
<b>Incompatible Materials:</b>	Avoid copper alloys. This product will react with any material containing active hydrogens such as water, alcohol, amines, bases, acids and any other compounds meant to react with isocyanates. The reaction with water is very slow under 122° F (50° C) but is accelerated at higher temperatures. Some reactions may be violent.
<b>Hazardous Decomposition Products:</b>	By fire and high heat: Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), oxides of nitrogen (NO <sub>x</sub> ), dense black smoke, hydrogen cyanide, isocyanate, isocyanic acid, other undetermined compounds.

## **11 - TOXICOLOGICAL INFORMATION**

<b>Toxicological Data:</b>	No toxicological data was found for the product.
----------------------------	--

## **12 - ECOLOGICAL INFORMATION**

<b>Ectotoxicity:</b>	No ectotoxicity data was found for the product.
<b>Environmental Fate:</b>	No environmental information found for this product.

## **13 - DISPOSAL CONSIDERATIONS**

<b>Waste Disposal:</b>	This product does not meet the definition of hazardous waste under U.S. EPA Hazardous Waste Regulations 40 CFR 261. Incineration is the preferred method. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and / or state and local guidelines.
------------------------	--

## **14 - TRANSPORTATION INFORMATION**

<b>DOT UN Number:</b>	No Data
<b>DOT Hazard Class:</b>	No Data

## **15 - REGULATORY INFORMATION**

<b>California PROP 65:</b>	Warning: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.
----------------------------	--



## 16 - ADDITIONAL INFORMATION

**HMIS Health Hazard:** 2  
**HMIS Fire Hazard:** 2  
**HMIS Reactivity:** 1  
**HMIS Other:** Hopsu  
**MSDS Creation Date:** June 9, 2009  
**MSDS Revision Date:** September 9, 2009  
**MSDS Revision Notes:** Quarterly Formula Update  
**MSDS Author:** iCOAT Products, Inc.

**Disclaimer:** This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guide for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this sheet.

**Trademark:** The trademarks, service marks, graphics and logos used on this MSDS are registered or unregistered trademarks of iCOAT Products Inc. All Rights Reserved.



**1 - PRODUCT and COMPANY INFORMATION**

**Company Info:** iCOAT Products, Inc. [www.icoatproducts.com](http://www.icoatproducts.com)  
**Company Address:** 1519 W. Grant St. Phoenix, AZ 85007, USA  
**Phone:** (602) 258-1114  
**Fax:** (602) 258-1119  
**CHEMTREC:** For emergencies in the US Call CHEMTREC: (800) 424-9300  
**Canutec:** In Canada, all CANUTEC: (613) 996-6666 (call collect)  
**MSDS Format:** According to ANSI Z400.1-2004

**Product Name:** CrackRX 98 or 100 (Part B)

**HMIS Classification:** H F R PP  
 1 2 0 G

**2 - COMPOSITION INFORMATION**

Ingredients / Components	CAS #	Vapor Pressure Mm Hg @ Temp	OSHA CLV	ACGIH TLV	WT %
Diisodecyl Phthalate	26761-40-0	.000 @ 58° F	No Data	No Data	25-30
* Aromatic Hydrocarbons	54742-94-	5.20 @ 100° F	No Data	No Data	25-30
(component of Aromatic Hydrocarbons) Naphthalene	91-20-3	No Data	10ppm TWA	10ppm	
(component of Aromatic Hydrocarbons) Trimethylbenzene 1,2,4-	95-63-6	No Data	25ppm TWA	25ppm	

\* INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372 (SEE SECTION 15 FOR MORE DETAILED INFORMATION).

**3 - HAZARDS IDENTIFICATION**

**This product is intended to be used as a two-component system. The mixing of these two components (part A and part B) will have hazards associated with both part A and part B. Refer to MSDS of each for complete hazard information when working with the mixture.**

**Emergency Overview :** Irritant

**Potential Health Effects**

**Target Organs:** Eye, Skin Contact, Inhalation.  
**Skin:** Prolonged or repeated skin contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Material can be absorbed through the skin and gives the same symptoms of inhalation and ingestion if sufficient amount is absorbed.  
**Eye:** Causes irritation and symptoms of reddening, tearing, stinging, and swelling.



**Inhalation:** At ambient temperatures, prolonged exposure may develop sore throat. At elevated temperatures or by aerosol spray, the inhalation risk is increased. Symptoms include difficulty in breathing and respiratory irritation. Other symptoms include central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

**Ingestion:** May be harmful if swallowed. May cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. Signs and symptoms of exposure to this material through breathing, swallowing and/or passage of the material through the skin may include: sweating, fever, stomach or intestinal upset, irritation, lung irritation, central nervous system depression, pain in the abdomen, frequent or painful urination, confusion, blood abnormalities, kidney damage, lung damage or respiratory failure.

**Carinogenicity:** NTP Carcinogen: Yes IARC Monographs: Yes OSHA Regulated: No

**Aggravation of Pre-Existing Conditions:** Abrasions or cuts on the skin will lead to increased absorption through the skin. This material may aggravate the following disorders: respiratory tract, skin, lung (asthma-like conditions), kidney, immune system, and eye. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with erythrocyte glucose-6-phosphatase deficiency are particularly susceptible to hemolytic agents and rapidly develop hemolytic anemia from ingestion or inhalation of this material (or component).

**Specific Health Risks:** Dermatitis. This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: Mild reversible liver effects, mild reversible kidney effects, cataracts, anemia, nasal damage, eye damage, central nervous system damage. Overexposure to this material (or its components) has been suggested to cause the following effects in humans: Cataracts, eye damage.

## **4 - FIRST AID MEASURES**

**Eye Contact:** Immediately flush eyes with plenty of water for 15 – 20 minutes. Use lukewarm water if possible. Get medical attention if irritation develops.

**Skin Contact:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek medical attention if irritation develops.

**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention. Never give anything by mouth to an unconscious person.

**Note to Physician:** This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Inhalation or ingestion of high levels of this material may cause a hemolytic reaction. Complications of acute intravascular hemolysis include anemia, leukocytosis, fever, hemoglobinuria, jaundice, renal insufficiency, and sometimes disturbances in liver function. Fats, for example, baby oil on the skin or ingested oil, facilitate absorption of naphthalene.

## **5 - FIRE FIGHTING MEASURES**

**Flash Point:** 128° F

**Upper Flammable / Explosive Limit:** 6.0 (method used = TCC)

**Lower Flammable / Explosive Limit:** 0.3 (method used = TCC)

**Extinguishing Media:** Use dry chemical foam, carbon dioxide, water fog or fine spray. Do not use direct water as it will spread fire.

**Special Firefighting Measures:** Do not use water jet.

**Protective Equipment:** As in any fire, wear Self –Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

**Unusual Fire and Explosion Hazards:** Sealed drums may heat up and explode during a fire. Cool with cold water spray. Material will burn when exposed to persistent direct flame.





**Static Discharge:** Material can accumulate static charges can cause an incendiary electrical discharge  
**Empty Containers:** Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be drained, properly bunged and properly returned to a drum reconditioner, or properly disposed of.

**NFPA Ratings:**

NFPA Health: 1  
NFPA Flammability: 2  
NFPA Reactivity: 0

## **6 - ACCIDENTAL RELEASE MEASURES**

**Personnel Precautions:** Use proper personal protective equipment as listed in Section 8. Evacuate non-emergency personnel. Isolate the area to prevent access. Remove ignition sources. Notify management. Control source of leak. Ventilate.

**Environmental Precautions:** Avoid runoff into storm sewers, ditches and waterways.

**Spill Cleanup Measures:** Cover spill with inert material. Collect and place in appropriately marked sealable containers for disposal. Wash spill area with soap and water. Take precautionary measures against static discharge. Material can cause slippery conditions. All material should then be disposed of in accordance with pertinent federal, state and local regulations.

## **7 - HANDLING AND STORAGE**

**Handling:** Use with adequate ventilation. Avoid breathing vapors, mist or dust. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas indicator.

**Storage:** Store in a cool, dry place. Keep from freezing. Keep product stored below 140° F (60° C). Keep container tightly closed when not in use.

**Hygiene Practices:** Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust.

**Other Precautions:** If contamination with isocyanates is suspected, do not reseal containers, as pressure may develop and heat buildup and foam production may occur.

## **8 - EXPOSURE CONTROLS / PERSONAL PROTECTION – EXPOSURE GUIDELINES**

**Engineering Controls:** Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of personal protective equipment.

**Eye/Face Protection:** Wear ANSI approved protective glasses or chemical working goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166

**Skin Protection:** Impervious protective gloves (nitrile), chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

**Respiratory Protection:** None required under normal use. Use NIOSH approved air supplied respirator during die cleaning, high temperature processing, air-spray environment or when thermal decomposition is suspected. Formaldehyde generation is possible if temperatures exceed 300° F.

**Other Protective:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



## **9 - PHYSICAL and CHEMICAL PROPERTIES**

<b>Physical State Appearance:</b>	Colored Liquid
<b>Odor:</b>	Sweet odor
<b>Boiling Point:</b>	343° F – 491° F
<b>Specific Gravity:</b>	0.977 (h20 = 1)
<b>Evaporation Rate:</b>	Slower than ether
<b>Vapor Density:</b>	Greater than 1 (Air = 1)
<b>Solubility in Water:</b>	Not soluble
<b>Flash Point:</b>	128° F
<b>Coating V.O.C.:</b>	2.18 lb/gal
<b>Material V.O.C.:</b>	2.18 lb/gal

## **10 - STABILITY and REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions to Avoid:</b>	Avoid high temperatures.
<b>Incompatible Materials:</b>	Avoid oxidizing agents, strong acids, and strong bases. Product reacts exothermally with isocyanates.
<b>Hazardous Decomposition Products:</b>	By fire and high heat: Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide (CO), oxides of nitrogen (NO <sub>x</sub> ), dense black smoke, other undetermined compounds.

## **11 - TOXICOLOGICAL INFORMATION**

**Toxicological Data:** No toxicological data was found for the product.

## **12 - ECOLOGICAL INFORMATION**

**Ectotoxicity:** No ectotoxicity data was found for the product.  
**Environmental Fate:** No environmental information found for this product.

## **13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal:** This product does not meet the definition of hazardous waste under U.S. EPA Hazardous Waste Regulations 40 CFR 261. Incineration is the preferred method. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and / or state and local guidelines.

## **14 - TRANSPORTATION INFORMATION**

**DOT UN Number:** No Data  
**DOT Hazard Class:** No Data

## **15 - REGULATORY INFORMATION**

**California PROP 65:** Warning: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.



## **16 - ADDITIONAL INFORMATION**

**HMIS Health Hazard:** 2  
**HMIS Fire Hazard:** 2  
**HMIS Reactivity:** 1  
**HMIS Other:** G  
**MSDS Creation Date:** June 9, 2009  
**MSDS Revision Date:** September 9, 2009  
**MSDS Revision Notes:** Quarterly Formula Update  
**MSDS Author:** iCOAT Products, Inc.

**Disclaimer:** This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guide for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this sheet.

**Trademark:** The trademarks, service marks, graphics and logos used on this MSDS are registered or unregistered trademarks of iCOAT Products Inc. All Rights Reserved.