SECTIO	N 1 - Product and	d Company Ide	entification	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
					21645-51-2	None	A None O None
Manufacturer:	E.I. du Pont de Nemours & Co. Du Pont Performance Coatings Wilmington, DE, 19898			Aromatic hydroca	irbon 64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Telephone:	Product informati Medical emergen Transportation er	icy: (8 nergency: (8	300) 441-7515 300) 441-3637 300) 424-9300 CHEMTREC)	Barium sulfate	7727-43-7	<0.0	A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust
Product:	Aviation Pre-Tre Related Product	,	ers, Surfacers and				O 15.0 mg/m3 Total Dust O 5.0 mg/m3
DOT Shipping N		See DOT ad					Respirable Dust D 10.0 mg/m3
Hazardous Male	rials Information:	See Section	10.	Benzyl alcohol	100-51-6	0.1@30.0°C	Total Dust D 10.0 ppm
Copyright 2006 E. reserved. Copies r					100-01-0	0.1600.0 0	8 & 12 hour TWA A None O None
				Bisphenol a/epich			
SECTION 2 - Composition/information on ingredients					25036-25-3	4.3	A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust
INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS				O 15.0 mg/m3 Total Dust
1,2,4-trimethyl be	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm	Butyl acetate			O 5.0 mg/m3 Respirable Dust
1,6-hexamethyle	ne diisocyanate 822-06-0	0.0@25.0°C	A 5.0 ppb O None	-	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm
2,4,6- tri((dimeth	ylamino)methyl) pl	henol	Onone				O 150.0 ppm
	90-72-2	0.0@21.0°C	A None O None	Calcium carbonat	te 471-34-1	None	A 10.0 mg/m3
2-ethylhexyl acet	ate 103-09-3	0.5	A None O None				O 15.0 mg/m3 Total Dust O 5.0 mg/m3
4,6-dimethyl-2-he	eptanone						Respirable Dust
	19549-80-5	None	A None O None	Calcium metasilic	ate 13983-17-0	<0.0	A 3.0 mg/m3
4-chlorobenzotrif	98-56-6	7.6@25.0°C	D 20.0 ppm 8 & 12 hour TWA A None O None				Respirable Dust A 10.0 mg/m3 inhalable dust O 15.0 mg/m3 Total Dust
Acetone	67-64-1	247.0@68.0°	F A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm	Coromio miorocol	horoc		O 5.0 mg/m3 Respirable Dust D 2.0 Fibres/ml D 5.0 mg/m3 Total Dust
			8 & 12 hour TWA	Ceramic microspl	66402-68-4	None	A 10.0 mg/m3
Acrylic polymer-				<b>.</b>			O 15.0 mg/m3
Acrylic polymer-l	NotAvail	None	A None O None	Chromic acid	1333-82-0	None	A None O None
	70942-12-0	None	A None	Cyclohexanone			ONOR
Alinhatis aski			O None		108-94-1	3.9	A 50.0 ppm
Aliphatic polyisor	cyanate resin 28182-81-2	None	S 1.0 mg/m3 15 min STEL S 0.5 mg/m3 A None O None				15 min STEL
Aluminum hydrat	e						

Aluminum hydrate



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
			Skin A 20.0 ppm Skin O 25.0 ppm				Respirable Dust O 15.0 mg/m3 TWA Total Dust
Diacetone alcoho	l 123-42-2	1.1@200.0°C	TWA A 50.0 ppm				O 5.0 mg/m3 TWA Respirable Dust
	123-42-2	1.1@200.0 C	TLV O 50.0 ppm	Methyl amyl ketor	ne 110-43-0	3.4	A 50.0 ppm
Diisobutyl ketone			TWA	Methyl ethyl ketor	1e		O 100.0 ppm
2	108-83-8	1.8	A 25.0 ppm O 50.0 ppm	men yr en yr nerei	78-93-3	None	A 300.0 ppm 15 min STEL
Epichlorohydrin-p	olyglycol 26142-30-3	1.4@80.0°C	A None O None				A 200.0 ppm O 200.0 ppm D 300.0 ppm
Epoxy hardener	NotAvail	5.2	A None				15 min TWA D 200.0 ppm
Epoxy resin			O None	Methyl isoamyl ke			8 & 12 hour TWA
Ethonal 2 (2 huta	NotAvail	None	A None O None	Methyl isobutyl ke	110-12-3	5.3	A None O None
Ethanol, 2-(2-butc	112-34-5	0.0	D 5.0 ppm A None	Methyl Isobutyl ke	108-10-1	15.1	A 75.0 ppm 15 min STEL
Ethyl acetate	141-78-6	93.2@25.0°C	O None A 400.0 ppm	N-beta-(aminoeth	vl)-gamma-amin	opropyltrimethox	A 50.0 ppm O 100.0 ppm vsilane
Ethylbenzene	141700	50.2@20.0 O	O 400.0 ppm		1760-24-3	<1.0	A None O None
	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm	N-butyl alcohol	71-36-3	5.6@68.0°F	A 20.0 ppm O 100.0 ppm
			O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA				D 50.0 ppm 15 min TWA D 25.0 ppm
Ethylene diamine	107-15-3	68.6	A 10.0 ppm	Octylphenoxypoly	ethoxy ethanol 9036-19-5	None	A None
	107-13-5	00.0	Skin O 10.0 ppm	Para-nonylphenol		None	O None
			D 1.0 ppm 8 & 12 hour TWA		84852-15-3	None	A None O None
Ethylene glycol m	onobutyl ether		Skin	Phosphoric acid	7664-38-2	None	A 3.0 mg/m3
	111-76-2	0.6	A 20.0 ppm O 50.0 ppm Skin D 5.0 ppm Skin				15 min STEL A 1.0 mg/m3 O 1.0 mg/m3 D 1.0 mg/m3 8 & 12 hour TWA
Hydrous magnesi		Nana		Polyester polyol	N = ( A = = 1	News	
	14807-96-6	None	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3	Polyester resin	NotAvail	None	A None O None
			8 & 12 hour TWA Respirable Dust		71010-58-7	None	A None O None
			D 0.1 mg/m3 8 & 12 hour TWA O None	Polyol	68551-65-5	0.7@22.0°C	A None O None
Isobutyl alcohol	78-83-1	9.7@22.0°C	A 50.0 ppm	Potassium fluorid	e 7789-23-3	None	A 2.5 mg/m3
Kaolin			O 100.0 ppm				as fluorine O None
	1332-58-7	None	A 2.0 mg/m3	Quartz-crystalline	e silica 14808-60-7	None	A 25.0 ug/m3

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS Respirable Dust 0 0.3 mg/m3 Total Dust 0 0.1 mg/m3 Respirable Dust D 0.1 mg/m3	INGREDIENTS CAS #
Salicylic acid	69-72-7	<0.0	Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust A None	Zinc phosphate 7779-90-0
Siloxanes and sila	ane esters NotAvail	<1.0	A None O None	*A=ACGIH, O=OSHA, D=DuPont, S- unless otherwise specified. Vapor   note
Strontium chroma	ate 7789-06-2	None	A 0.5 ug/m3 Cr(VI) O 5.0 ug/m3 Cr(VI)	SECTION 3 - Hazar
Strontium oxide	1314-11-0	None	A None O None	Potential Health Effects: Inhalation: May cause nose and throat irritation. I
T-butyl acetate	540-88-5	None	A 200.0 ppm O 200.0 ppm	depression, characterized by the follow dizziness, nausea, staggering gait, co have associated repeated and prolono
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust	permanent brain and nervous system is mixed with an isocyanate activator/h may apply: Exposure to isocyanates n This effect may be permanent. Sympt with shortness of breath, wheezing, co sensitization. This effect may be delay Repeated overexposure to isocyanate
Trade secret	NotAvail	0.6@21.0°C	A None O None	function, which may be permanent. In problems or prior reactions to isocyana or spray mist of this product.
Triphosphoric aci	d, aluminum salt 13939-25-8	t (1:1) None	A 2.0 mg/m3 TWA Respirable Dust O None	<b>Ingestion:</b> May result in gastrointestinal distress
Water	7732-18-5	23.6	A None O None	Skin or Eye Contact: May cause irritation or burning of the e contact may cause skin irritation with o
Wollastonite	13983-17-0	None	D 2.0 Fibres/ml D 5.0 mg/m3 Total Dust A None O None	Other Potential Health Effects in add 1,6-hexamethylene diisocyanate Overexposure may cause asthma-like wheezing, cough, which may be perm sensitization. This effect may be delay
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA	The following medical conditions may skin disorders, respiratory disorders. ( any of the following organs/systems: lu possible corrosive action in the mouth Potential skin sensitizer that may caus dermatitis resulting in severe irritation, Skin or eye contact may cause any of 2,4,6- tri((dimethylamino)methyl) ph
Zinc oxide	1314-13-2	None	A 10.0 mg/m3 15 min STEL	The following medical conditions may respiratory disease, eye disorders, ski any of the following: severe irritation, b the following: severe irritation, burns, b exposure may cause effects on any of

VAPOR **EXPOSURE** PRESSURE LIMITS **Respirable Dust** A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust None O 5.0 mg/m3 **Respirable Dust** A None

SeSuppliers. Limits are 8 hour TWA pressure @20°C unless otherwise ed.

## ds identification

May cause nervous system wing progressive steps: headache, nfusion, unconsciousness. Reports aed overexposure to solvents with damage. If this product contains or nardener, the following health effects nay cause respiratory sensitization. oms include an asthma-like reaction ough or permanent lung ed for several hours after exposure. s may cause a decrease in lung dividuals with lung or breathing ates must not be exposed to vapors

eyes. Repeated or prolonged liquid discomfort and dermatitis.

# dition to those listed above:

reactions with shortness of breath, anent; or permanent lung ed for several hours after exposure. be aggravated by exposure: asthma, Overexposure may cause damage to ungs, skin. Can result in irritation and , stomach tissue and digestive tract. e allergic reactions and contact dryness, and cracking of the skin. the following: irritation.

#### nenol

be aggravated by exposure: asthma, in disorders. Skin contact may cause burns. Eye contact may cause any of blindness. Repeated or prolonged exposure may cause effects on any of the following organs/systems: nervous system, respiratory system, skin and eyes.

## 4-chlorobenzotrifluoride

Increased susceptibility to the effects of this material may be observed in

people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

#### Acetone

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

#### Aliphatic polyisocyanate resin

Overexposure may cause asthma-like reactions with shortness of breath, wheezing, cough, which may be permanent; or permanent lung sensitization. This effect may be delayed for several hours after exposure. The following medical conditions may be aggravated by exposure: asthma, skin disorders, respiratory disorders. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Skin or eye contact may cause any of the following: irritation.

#### Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

#### Benzyl alcohol

This substance may cause effects on any of the following organs/systems: central nervous system. Repeated or prolonged skin contact may cause any of the following: skin sensitization.

#### Bisphenol a/epichlorohydrin polymer

Genetic damage in bacterial cell cultures, but not observed in animals.

## **Butyl acetate**

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

## Calcium metasilicate

The following medical conditions may be aggravated by exposure: asthma, lung disease, respiratory disease.

#### Chromic acid

Is an IARC, NTP or OSHA carcinogen. Health studies have shown that chromate pigment manufacturing may be associated with an increase risk of lung cancer. Chromic acid overexposure causes severe irritation to eyes and may cause blindness. May cause deep, painful penetrating ulcers on skin. May cause severe irritation of the respiratory tract and nasal septum and possible perforation. Prolonged or repeated eye contact may cause conjunctivitis. Solutions can be absorbed through the skin in harmful amounts leading to kidney failure and death. Death has been avoided in several cases through early renal dialysis. Repeated or prolonged skin contact may cause any of the following: dermatitis, allergic skin rash. The following medical conditions may be aggravated by overexposure: asthma. Repeated or prolonged skin or eye contact may cause any of the following: irritation. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation, sensitization, .

WARNING: This chemical is known to the State of California to cause cancer.

Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. Liquid splashes in the eye may result in chemical burns. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive.

#### **Diacetone alcohol**

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system, central nervous system, eyes, respiratory system, skin, red blood cells. Overexposure may cause damage to any of the following organs/systems: kidneys, liver, red blood cells. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive.

## **Diisobutyl ketone**

The following medical conditions may be aggravated by exposure: asthma, blood, dermatitis. Contact may cause skin irritation with discomfort or rash. Repeated exposure may cause allergic skin rash, itching, swelling. This substance may cause damage to any of the following organs/systems: eyes, kidneys, liver. Extremely high oral and inhalation doses in laboratory animals have shown weight changes in various organs such as the liver, kidney, brain, heart and adrenal gland. In add ition liver and kidney injury were observed at the extremely high inhalation level. In another inhalation study there was a slight depression in the white blood cell count. Liquid or vapor causes irritation, experienced as stinging, excess blinking and tear production, with excess redness and swelling of the conjuctiva.

#### Epoxy hardener

Skin contact may cause any of the following: skin sensitization, skin irritation.

## Ethanol, 2-(2-butoxyethoxy)-

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, eyes, kidneys, liver, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver. Recurrent overexposure may result in liver and kidney injury. High doses in laboratory animals have shown non specific effects such as irritation, weight loss, moderate blood changes. Eye contact may cause any of the following: severe irritation, burns, corneal injury.

#### Ethyl acetate

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.

#### Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects

WARNING: This chemical is known to the State of California to cause cancer.

## **Ethylene diamine**

Ingestion may cause any of the following: burns to mouth and stomach, aspiration leading to lung damage.. Repeated or prolonged skin contact may cause any of the following: dermatitis, skin sensitization. Skin contact may cause any of the following: burns. Eye contact may cause any of the following: burns. Eye contact may cause any of the following: severe irritation, burns, corneal injury. Inhalation of high vapor concentrations may cause any of the following: lung injury. The following medical conditions may be aggravated by overexposure: asthma, dermatitis, pulmonary conditions. If absorbed through the skin, may be: harmful. Repeated or prolonged exposure may cause effects on any of the following organs/systems: kidneys, liver, respiratory system.

#### Ethylene glycol monobutyl ether

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, central nervous system, eyes, gastrointestinal system, kidneys, liver,

# Cyclohexanone

respiratory system, skin. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. If absorbed through the skin, may be: harmful.

## Isobutyl alcohol

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

## Kaolin

The following medical conditions may be aggravated by exposure: asthma, dermatitis. Repeated or prolonged inhalation may cause any of the following: lung injury.

## Methyl ethyl ketone

Material is irritating to mucous membranes and upper respiratory tract. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, eyes, respiratory system, skin. Prolonged or repeated overexposure may cause any of the following: conjunctivitis, dermatitis. High concentrations have caused embryotoxic effects in laboratory animals. Aspiration may occur during swallowing or vomiting, resulting in lung damage. Ingestion may cause headache, nausea, vomiting, dizziness, and drowsiness.

## Methyl isoamyl ketone

Extremely high oral doses in laboratory animals have shown weight changes in various organs such as the liver, kidney and adrenal gland. In addition liver injury was observed.

## Methyl isobutyl ketone

The following medical conditions may be aggravated by exposure: asthma, respiratory disease, eye disorders, pulmonary conditions, skin disorders. Repeated or prolonged skin contact may cause any of the following: dryness, cracking of the skin, defatting. Inhalation may cause any of the following: dizziness, stupor (central nervous system depression), drowsiness, respiratory tract irritation.

## N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

# Octylphenoxypolyethoxy ethanol

Eye contact may cause any of the following: conjunctivitis, severe irritation, chemical burns.

## Phosphoric acid

Ingestion may cause any of the following: burns to mouth and stomach. Inhalation of vapor may cause any of the following: burns to respiratory system. Skin or eye contact may cause any of the following: burns.

## Potassium fluoride

Contact may cause skin burns.

## Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

## Salicylic acid

Individuals with preexisting diseases of the liver or kidneys may have increased susceptibility to the toxicity of excessive exposures. Skin

permeation can occur in amounts capable of producing the effects of systemic toxicity.

## Strontium chromate

Is an IARC, NTP or OSHA carcinogen. Health studies have shown that chromate pigment manufacturing may be associated with an increase risk of lung cancer. Repeated or prolonged skin contact may cause any of the following: dermatitis, allergic skin rash. The following medical conditions may be aggravated by overexposure: asthma. Repeated or prolonged skin or eye contact may cause any of the following: irritation. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation, sensitization, .

WARNING: This chemical is known to the State of California to cause cancer.

## **T-butyl acetate**

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, eyes, gastrointestinal system, liver, skin.

## Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m3 respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m3 level are not relevant to the workplace.'Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

#### Wollastonite

Long-term respiratory exposure exceeding TLV may damage the lungs, leading to bronchitis and impairment of lung capacity.

#### **Xylene**

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

## **SECTION 4 - First aid measures**

# First Aid Procedures:

#### Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

#### Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

#### Skin or Eye Contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with

soap and water. If irritation occurs, contact a physician.

#### **SECTION 5 - Fire-fighting measures**

Flash Point (Closed Cup): See Section 11 for exact values

Flammable Limits: LFL 0 % UFL 12.8 %

## **Extinguishing Media:**

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

#### **Fire Fighting Procedures:**

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

# Fire and Explosion Hazards:

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

#### **SECTION 6 - Accidental release measures**

## Steps to be taken in case material is released or spilled:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO2 to vent. After 48 hours, material may be sealed and disposed of properly.

## **SECTION 7 - Handling and storage**

## Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100-200  $^\circ$  F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100  $^\circ$  F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20  $^\circ$  F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120  $^\circ$  F. If product is waterbased do not freeze.

## Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation , and gloves.

#### **SECTION 8 - Exposure controls / personal protection**

## Engineering controls and work practices:

Ventilation:

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

## **Respiratory protection**

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

#### **Protective equipment**

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

## Skin protection

Neoprene gloves and coveralls are recommended.

#### Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

## **SECTION 9 - Physical and chemical properties**

Evaporation rate Slower than Ether Water solubility NIL Vapour Density Heavier than Air Approx. Boiling Range( °C) 46.1 - 311  $\,^{\circ}\mathrm{C}$ Approx. Freezing Range( °C) -108 - -107.9 °C Gallon weight (lbs/gal) 6.87 - 12.8 Specific Gravity 0.82 - 1.53 Percent Volatile by Volume 30.24 - 100.00 Percent Voliatile by Weight 24.27 - 100.00 Percent Solid by Volume 0.00 - 69.76 Percent Solid by Weight 0.00 - 75.73

#### **SECTION 10 - Stability and reactivity**

# Stability:

Stable

Incompatibility (materials to avoid): None reasonably foreseeable

## Hazardous Decomposition Products:

CO, CO2, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

## Hazardous Polymerization:

Will not occur.

#### Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact: None known

**SECTION 11 - Additional Information** 

13100S<sup>™</sup> 1,6-hexamethylene diisocyanate(0.2%\*@), 2-ethylhexyl acetate, Aliphatic polyisocyanate resin, Butyl acetate, Ethyl acetate GAL WT: 8.98 WT PCT SOLIDS: 75.00 VOL PCT SOLIDS: 69.76 SOLVENT DENSITY: 7.43 VOC LE: 2.2 VOC AP: 2.2 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

**131385<sup>™</sup>** 2,4,6- tri((dimethylamino)methyl) phenol, Isobutyl alcohol, Methyl isobutyl ketone(27%\*@),

N-beta-(aminoethyl)-gamma-aminopropyltrimethoxysilane, Salicylic acid, Siloxanes and silane esters

GAL WT: 6.87 WT PCT SOLIDS: 11.11 VOL PCT SOLIDS: 8.67 SOLVENT DENSITY: 6.69 VOC LE: 6.1 VOC AP: 6.1 FLASH POINT: 20°F to below 73°F H: 3 F: 3 R: 2 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

131505<sup>™</sup> 1,2,4-trimethyl benzene(1%\*), 4-chlorobenzotrifluoride, Acetone, Acrylic polymer-A, Aromatic hydrocarbon, Benzyl alcohol, Methyl isoamyl ketone, Para-nonylphenol, T-butyl acetate, Trade secret GAL WT: 8.66 WT PCT SOLIDS: 35.06 VOL PCT SOLIDS: 36.02 SOLVENT DENSITY: 8.75 VOC LE: 2.6 VOC AP: 1.4 FLASH POINT: Below 20° F H: 3 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

**13160S<sup>™</sup>** 4-chlorobenzotrifluoride, Acrylic polymer-A, Epoxy hardener, Ethylbenzene(0.7 - 1.8%\*@), Ethylene diamine(1.8% #), Methyl isoamyl ketone, N-butyl alcohol(12%\*), Para-nonylphenol, T-butyl acetate, Xylene(5 - 7%\*@)

GAL WT: 8.47 WT PCT SOLIDS: 51.09 VOL PCT SOLIDS: 52.51 SOLVENT DENSITY: 8.45 VOC LE: 2.7 VOC AP: 2.2 FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

13204S<sup>™</sup> Ethanol, 2-(2-butoxyethoxy)-(5%\*@), Ethylene glycol monobutyl ether(14%\*), Phosphoric acid, Water GAL WT: 9.50 WT PCT SOLIDS: 29.50 VOL PCT SOLIDS: 17.57 SOLVENT DENSITY: 8.13 VOC LE: 4.4 VOC AP: 1.8

FLASH POINT: 141°F - 200°F H: 2 F: 2 R: 1 OSHA STORAGE: IIIA TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

**132055<sup>™</sup>** Ethylene glycol monobutyl ether(14%\*), Octylphenoxypolyethoxy ethanol, Phosphoric acid, Potassium fluoride, Water

GAL WT: 9.33 WT PCT SOLIDS: 26.34 VOL PCT SOLIDS: 15.75 SOLVENT DENSITY: 8.15 VOC LE: 3.9 VOC AP: 1.3 FLASH POINT: Above 200°F H: 2 F: 1 R: 1 OSHA STORAGE: IIIB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

132065<sup>™</sup> Chromic acid(1.0%\*@), Water GAL WT: 8.37 WT PCT SOLIDS: 1.01 VOL PCT SOLIDS: 0.38 SOLVENT DENSITY: 8.32 VOC LE: 0.0 VOC AP: 0.0 FLASH POINT: Above 200°F H: 0 F: 1 R: 0 OSHA STORAGE: IIIB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

132385<sup>™</sup> Barium sulfate, Cyclohexanone, Diacetone alcohol, Epoxy resin, Ethylbenzene(0.1 - 0.2%\*@), Kaolin, Methyl ethyl ketone, Methyl isobutyl ketone(18%\*@), Strontium chromate(19.3%\*@), Titanium dioxide(2.7%) GAL WT: 11.62 WT PCT SOLIDS: 66.95 VOL PCT SOLIDS: 45.67 SOLVENT DENSITY: 7.05 VOC LE: 3.8 VOC AP: 3.8 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES **13520S<sup>™</sup>** 2-ethylhexyl acetate, Acetone, Acrylic polymer-B, Aluminum hydrate, Calcium carbonate, Ethyl acetate, Ethylbenzene(0.1 - 0.3%\*@), Hydrous magnesium silicate, Kaolin, Methyl amyl ketone, Polyester resin, Polyol, Quartz-crystalline silica(0.1%), Titanium dioxide(28.5%), Xylene(1 - 1%\*@), Zinc oxide(1%\*)

GAL WT: 12.80 WT PCT SOLIDS: 75.73 VOL PCT SOLIDS: 54.65 SOLVENT DENSITY: 6.84 VOC LE: 2.4 VOC AP: 2.0 FLASH POINT: Below 20° F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

**13550S<sup>™</sup>** 1,2,4-trimethyl benzene(1%\*), 4,6-dimethyl-2-heptanone, Acetone, Acrylic polymer-A, Aromatic hydrocarbon, Barium sulfate, Bisphenol a/epichlorohydrin polymer, Calcium metasilicate, Diisobutyl ketone, Epichlorohydrin-polyglycol, Ethylbenzene(0.1 - 0.2%\*@), Hydrous magnesium silicate, Kaolin, N-butyl alcohol(4%\*), Polyester polyol, Strontium chromate(6.9%\*@), Titanium dioxide(11.3%), Wollastonite, Zinc phosphate(2%\*)

GAL WT: 12.47 WT PCT SOLIDS: 75.13 VOL PCT SOLIDS: 54.92 SOLVENT DENSITY: 6.83 VOC LE: 2.8 VOC AP: 2.5 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

13560S<sup>™</sup> 1,2,4-trimethyl benzene(1%\*), 4,6-dimethyl-2-heptanone, Acetone, Acrylic polymer-A, Aromatic hydrocarbon, Barium sulfate, Bisphenol a/epichlorohydrin polymer, Calcium carbonate, Ceramic microspheres, Diisobutyl ketone, Epichlorohydrin-polyglycol, Ethylbenzene(0.4 - 0.9%\*@), Hydrous magnesium silicate, Methyl amyl ketone, N-butyl alcohol(4%\*), Polyester polyol, Titanium dioxide(18.7%), Wollastonite, Xylene(3 - 3%\*@), Zinc phosphate(3%\*) GAL WT: 12.67 WT PCT SOLIDS: 75.43 VOL PCT SOLIDS: 54.76 SOLVENT DENSITY: 6.84 VOC LE: 2.8 VOC AP: 2.6 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

**13570S<sup>™</sup>** 1,2,4-trimethyl benzene(1%\*), 4,6-dimethyl-2-heptanone, Acetone, Acrylic polymer-A, Aromatic hydrocarbon, Barium sulfate, Bisphenol a/epichlorohydrin polymer, Calcium metasilicate, Diisobutyl ketone, Epichlorohydrin-polyglycol, Ethylbenzene(0.1 - 0.2%\*@), Hydrous magnesium silicate, Kaolin, Methyl amyl ketone, N-butyl alcohol(4%\*), Polyester polyol, Strontium oxide, Titanium dioxide(12.1%), Triphosphoric acid, aluminum salt (1:1)

GAL WT: 12.41 WT PCT SOLIDS: 75.07 VOL PCT SOLIDS: 54.93 SOLVENT DENSITY: 6.83 VOC LE: 2.8 VOC AP: 2.6 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

137565<sup>™</sup> 4-chlorobenzotrifluoride, Acetone GAL WT: 10.11 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 10.11 VOC LE: 0.0 VOC AP: 0.0 FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

## Footnotes:

**TSCA:** in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

**ACGIH** = American Conference of Government Industrial Hygienists.

IARC = International Agency for Research on Cancer.

NTP = National Toxicology Program.

**OSHA** = Occupational Safety and Health Administration.

PNOR = Particles Not Otherwise Regulated.

**PNOC** = Particles Not Otherwise Classified.

**STEL** = Short Term Exposure Limit.

TWA = Time Weighted Average.

**TM** = Is a Trademark of E.I. DuPont de Nemours & Co.

\* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Clean Air Act Hazardous Air Pollutant.

# = EPCRA Section 302 - Extremely Hazardous Substance.

# NOTICE:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

# **Product Manager: Refinish Sales**

MSDS Prepared by DuPont Performance Coatings Regulatory Affairs