

Trans

Dupont
Main

DuPont Performance Coatings
MATERIAL SAFETY DATA SHEET
EPOXY PRIMERS, ENAMELS, AND ACTIVATORS

SECTION 1 - Product and Company Identification				INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Manufacturer:	E.I. DuPont de Nemours & Co. DuPont Performance Coatings Wilmington, DE, 19898						TWAE Respirable D 1.0 mg/m3 Respirable Dus A 2.0 mg/m3 Respirable Dus
Telephone:	Product Information:	(800) 441-7515		AROMATIC HYDROCARBON-A	64742-94-5	10.0	D 100.0 ppm A None O None
	Medical Emergency:	(800) 441-3637					
	Transportation Emergency:	(800) 424-9300 (CHEMTREC)					
Product:	M7 EPOXY PRIMERS, ENAMELS, AND ACTIVATORS						
DOT Shipping Name:	See DOT addendum.			AROMATIC HYDROCARBON-B	64742-95-6	10.0 @ 25.0 Deg C	D 50.0 ppm A None O None
Hazardous Materials Information:	See Section 10.						

SECTION 2 - Composition, Information on Ingredients				INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
				BARIUM SULFATE	7727-43-7	None	D 10.0 mg/m3 A 10.0 mg/m3 Total Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dus
ACRYLIC POLYMER-A	Not Avail	None	A None O None				
ACRYLIC POLYMER-B	26010-51-5	None	A None O None	BISPHENOL A/EPICHLOROHYDRIN POLYMER	25036-25-3	2.7 @ 23.9 Deg C	A None O None
ACRYLIC POLYMER-C	148969-95-3	None	A None O None	BISPHENOL-EPICHLOROHYDRIN TYPE POLYMER	25068-38-6	None	A None O None
ALUMINUM	7429-90-5	None	A 10.0 mg/m3 O None	BUTYL ACETATE	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
AMIDO AMINE	Not Avail	None	A None O None	CALCIUM CARBONATE	471-34-1	None	A 10.0 mg/m3 O 15.0 mg/m3 A 5.0 mg/m3 Respirable
AMIDOAMINE	Not Avail	None	A None O None	CALCIUM PHOSPHOSILICATE	Not Avail	None	A None O None
AMIDOAMINE RESIN-A	Not Avail	None	A None O None	CARBON BLACK	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
AMIDOAMINE RESIN-B	68443-08-3	None	A None O None	CUMENE	98-82-8	3.7	A 50.0 ppm O 50.0 ppm Skin
AMINE SALT OF POLYCARBONIC ACID	Not Avail	None	A None O None				
AMORPHOUS SILICA-A	7631-86-9	None	A 1.0 mg/m3 15 min STEL O 15.0 mg/m3 A 0.2 mg/m3 Respirable O 5.0 mg/m3 Respirable				
AMORPHOUS SILICA - FUMED	69012-64-2	None	O 2.0 mg/m3				

MSDS DIC 7**EPOXY PRIMERS, ENAMELS, AND ACTIVATORS****July, 2001**

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
ORGANOPHILIC CLAY	Not Avail	None	A None O None		1330-20-7	7.0 @ 25.0 Deg C	A 150.0 ppm 15 min STEL D 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 100.0 ppm 8 & 12 hour TWA
PARA-NONYLPHENOL	84852-15-3	None	A None O None				
PHENOLIC POLYMER	9003-35-4	None	A None O None	ZINC OXIDE	1314-13-2	None	O 5.0 mg/m3 Respirable A 10.0 mg/m3 Total Dust O 10.0 mg/m3 Total Dust
PHthalOCYANINE BLUE PIGMENT	147-14-8	None	A None O None				
POLYAMIDE RESIN	68410-23-1	None	A None O None	1,2,4-TRIMETHYL BENZENE			
PROPYLENE CARBONATE	108-32-7	0.0	A None O None		95-63-6	7.0 @ 44.4 Deg C	A 25.0 ppm O 25.0 ppm
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	3.7	D 10.0 ppm 12 hr TWA A None O None	2-ETHYLHEXYL GLYCIDYL ETHER	Not Avail	None	A None O None
QUARTZ-CRYSTALLINE SILICA	14808-60-7	None	O 0.1 mg/m3 Respirable Dust A 50.0 ug/m3 Respirable Dust	2,4,6-DIMETHYLAMINOMETHYL PHENOL	Not Avail	0.0 @ 21.0 Deg C	A None O None
QUINACRIDONE PIGMENT	1047-16-1	None	A None O None	4,6-DIMETHYL-2-HEPTANONE	19549-80-5	None	A None O None
TITANIUM DIOXIDE	13463-67-7	None	A 10.0 mg/m3 D 5.0 mg/m3 Respirable D 10.0 mg/m3 Total Dust O 15.0 mg/m3 Total Dust	SECTION 3 - Hazards Information			
TOLUENE	108-88-3	22.0	O 300.0 ppm CEIL O 200.0 ppm D 50.0 ppm 8 & 12 hour TWA A 50.0 ppm Skin O 500.0 ppm 10 min TWA Maximum	Potential Health Effects:			
UREA FORMALDEHYDE RESIN	Not Avail	5.5	A None O None	Inhalation:			May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
XYLENE				Ingestion:			May result in gastrointestinal distress.
				Skin or eye contact:			May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.
				Other Potential Health Effects in addition to those listed above:			
				AMIDOAMINE			Contact may cause skin irritation with discomfort or rash. Causes eye corrosion and permanent injury.
				AMIDOAMINE RESIN-B			Contact may cause skin irritation with discomfort or rash. Contact may cause skin burns. Causes eye corrosion and permanent injury.

MSDS DIC 7
EPOXY PRIMERS, ENAMELS, AND ACTIVATORS
July, 2001

damage. May cause central nervous system depression with headache, stupor, uncoordinated or strange behavior, or unconsciousness.

METHYL ISOBUTYL KETONE

Individuals with preexisting diseases of the central nervous system or lungs may have increased susceptibility to the toxicity of excessive exposures. Recurrent overexposure may result in liver and kidney injury.

MICA

Repeated and prolonged overexposure may lead to chronic lung disease.

N-BUTYL ALCOHOL

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

NAPHTHALENE

Individuals with preexisting diseases of the liver or kidneys may have increased susceptibility to the toxicity of excessive exposures. Recurrent overexposure may result in liver and kidney injury.

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE

May cause eye irritation with discomfort, tearing, or blurred vision. May cause moderate eye burning. Recurrent overexposure may result in liver and kidney injury. May cause irritation of the upper respiratory passages.

QUARTZ-CRYSTALLINE SILICA

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to typical x-ray changes and chronic lung disease.

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

TITANIUM DIOXIDE

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.

TOLUENE

Chromosomal changes in the circulating blood of exposed workers have been reported. The significance of these reports is unclear because of exposure to other substances. 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 respiratory system skin

May cause eye irritation with discomfort, tearing, or blurred vision. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Aspiration may occur during swallowing or vomiting, resulting in lung damage. Material may be harmful or fatal if swallowed.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

UREA FORMALDEHYDE RESIN

This chemical is a formaldehyde donor. Formaldehyde is an IARC, NTP or OSHA carcinogen and has shown mutagenic activity in laboratory cell culture tests. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. Epidemiology studies conducted to date have not found evidence of formaldehyde related tumor induction in humans.

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

XYLENE

Individuals with preexisting disease of the central nervous system, kidneys, liver, cardiovascular system, lungs, or bone marrow may have increased susceptibility to the toxicity of excessive exposures. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. 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.

ZINC OXIDE

May cause abnormal liver function.

2,4,6-DIMETHYLAMINOMETHYL PHENOL

Can be absorbed through the skin in harmful amounts.

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:

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 - Firefighting Measures

Flash Point (Closed Cup)

See Section 11 for exact values.

Flammable limits

LFL 0.0 % UFL 13.1 %

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 & 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. 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.

SECTION 7 - Handling and Storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 -

MSDS DIC 7

EPOXY PRIMERS, ENAMELS, AND ACTIVATORS

July, 2001

LF-63225P Amidoamine (13.9%), Aromatic Hydrocarbon-B (9.1%), Bisphenol Epichlorohydrin Type Polymer (10.5%), Mica (17.2%), Quartz-Crystalline Silica (0.9%), Titanium Dioxide (25.8%), Zinc Oxide (15.2%*), 1,2,4-Trimethyl Benzene (1-7%*), 2,4,6-Dimethylaminomethyl Phenol (1.5%)

GAL WT: 13.41 WT PCT SOLIDS: 85.24 VOL PCT SOLIDS: 72.58

SOLVENT DENSITY: 7.22 VOC LE: 2.0 VOC AP: 2.0 FLASH POINT: 100 deg F - 141 deg F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63325P Amidoamine (17.0%), Aromatic Hydrocarbon-B (10.8%), Bisphenol Epichlorohydrin Type Polymer (12.8%), Calcium Phosphosilicate (6.0%), Carbon Black (0.2%), Cumene (0-1%*@), Hydrous Magnesium Silicate (3.3%), Mica (22.6%), Quartz-Crystalline Silica (1.2%), Titanium Dioxide (15.3%), 1,2,4-Trimethyl Benzene (2-8%*), 2,4,6-Dimethylaminomethyl Phenol (1.8%)

GAL WT: 11.78 WT PCT SOLIDS: 81.94 VOL PCT SOLIDS: 70.59

SOLVENT DENSITY: 7.24 VOC LE: 2.1 VOC AP: 2.1 FLASH POINT: 100 deg F - 141 deg F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63525P Amidoamine (14.9%), Aromatic Hydrocarbon-B (9.8%), Bisphenol Epichlorohydrin Type Polymer (11.3%), Calcium Phosphosilicate (5.1%), Hydrous Magnesium Silicate (2.8%), Mica (18.5%), Quartz-Crystalline Silica (1.0%), Titanium Dioxide (27.6%), 1,2,4-Trimethyl Benzene (2-7%*), 2,4,6-Dimethylaminomethyl Phenol (1.6%)

GAL WT: 12.78 WT PCT SOLIDS: 83.90 VOL PCT SOLIDS: 71.51

SOLVENT DENSITY: 7.23 VOC LE: 2.1 VOC AP: 2.1 FLASH POINT: 100 deg F - 141 deg F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63725P Amidoamine (15.0%), Aromatic Hydrocarbon-B (9.8%), Bisphenol Epichlorohydrin Type Polymer (11.3%), Calcium Phosphosilicate (5.1%), Hydrous Magnesium Silicate (2.8%), Mica (18.6%), Quartz-Crystalline Silica (1.0%), Titanium Dioxide (27.7%), 1,2,4-Trimethyl Benzene (2-7%*), 2,4,6-Dimethylaminomethyl Phenol (1.6%)

GAL WT: 12.77 WT PCT SOLIDS: 83.92 VOL PCT SOLIDS: 71.56

SOLVENT DENSITY: 7.23 VOC LE: 2.1 VOC AP: 2.1 FLASH POINT: 100 deg F - 141 deg F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-71125P Amidoamine (13.4%), Aromatic Hydrocarbon-B (8.9%), Barium Sulfate (26.8%), Bisphenol Epichlorohydrin Type Polymer (10.1%), Calcium Phosphosilicate (5.6%), Hydrous Magnesium Silicate (3.1%), Iron Oxide (8.9%), Mica (13.8%), Quartz-Crystalline Silica (1.3%), 1,2,4-Trimethyl Benzene (1-6%*), 2,4,6-Dimethylaminomethyl Phenol (1.4%)

GAL WT: 13.81 WT PCT SOLIDS: 85.31 VOL PCT SOLIDS: 71.95

SOLVENT DENSITY: 7.24 VOC LE: 2.0 VOC AP: 2.0 FLASH POINT: 100 deg F - 141 deg F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

525-333 Amidoamine (8.7%), Barium Sulfate (24.7%), Bisphenol Epichlorohydrin Type Polymer (6.5%), Calcium Phosphosilicate (6.1%), Diisobutyl Ketone (6.0%), Ethylene Glycol Monobutylether (8.4%*@), Hydrous Magnesium Silicate (12.9%), Kaolin (10.9%), Methyl Amyl Ketone (5.2%), Methyl Ethyl Ketone (5.8%*@), 2,4,6-Dimethylaminomethyl Phenol (1.2%), 4,6-Dimethyl-2-Heptanone (1.5%)

GAL WT: 12.27 WT PCT SOLIDS: 72.77 VOL PCT SOLIDS: 51.92

SOLVENT DENSITY: 6.94 VOC LE: 3.3 VOC AP: 3.3 FLASH POINT: 20 deg F to below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

1LB26P Aromatic Hydrocarbon-B (5.6%), Barium Sulfate (6.8%), Bisphenol Epichlorohydrin Type Polymer (30.4%), Diacetone Alcohol (7.0%), Ethylbenzene (0.1-0.2%*@), Hydrous Magnesium Silicate (4.1%), Titanium Dioxide (37.4%), Xylene (1-2%*@), 1,2,4-Trimethyl Benzene (1-4%*)

GAL WT: 13.48 WT PCT SOLIDS: 80.85 VOL PCT SOLIDS: 65.47

SOLVENT DENSITY: 7.49 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

2MB26P Aromatic Hydrocarbon-B (5.1%), Barium Sulfate (15.4%), Bisphenol Epichlorohydrin Type Polymer (33.3%), Diacetone Alcohol (7.9%), Ethylbenzene (0.1-0.2%*@), Ethylene Glycol Monobutyl ether (1.4%*@), Hydrous Magnesium Silicate (9.4%), Titanium Dioxide (19.6%), Xylene (1-2%*@), 1,2,4-Trimethyl Benzene (1-4%*)

GAL WT: 12.91 WT PCT SOLIDS: 79.96 VOL PCT SOLIDS: 65.52

SOLVENT DENSITY: 7.51 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

3DB26P Aromatic Hydrocarbon-B (4.3%), Barium Sulfate (20.7%), Bisphenol Epichlorohydrin Type Polymer (34.2%), Diacetone Alcohol (8.6%), Ethylbenzene (0.1-0.3%*@), Ethylene Glycol Monobutylether (1.9%*@), Hydrous Magnesium Silicate (12.6%), Titanium Dioxide (10.1%), Xylene (1-2%*@), 1,2,4-Trimethyl Benzene (1-3%*)

GAL WT: 12.78 WT PCT SOLIDS: 80.02 VOL PCT SOLIDS: 66.08

SOLVENT DENSITY: 7.53 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

4NB26P Aromatic Hydrocarbon-B (2.8%), Barium Sulfate (25.9%), Bisphenol Epichlorohydrin Type Polymer (36.8%), Diacetone Alcohol (9.3%), Ethylbenzene (0.1-0.3%*@), Ethylene Glycol Monobutylether (2.3%*@), Hydrous Magnesium Silicate (15.8%), Xylene (1-2%*@), 1,2,4-Trimethyl Benzene (0-2%*)

GAL WT: 12.64 WT PCT SOLIDS: 81.17 VOL PCT SOLIDS: 68.56

SOLVENT DENSITY: 7.58 VOC LE: 2.4 VOC AP: 2.4 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63226P Aromatic Hydrocarbon-B (5.9%), Barium Sulfate (6.8%), Bisphenol Epichlorohydrin Type Polymer (30.0%), Diacetone Alcohol (7.0%), Ethylbenzene (0.1-0.2%*@), Hydrous Magnesium Silicate (4.1%), Titanium Dioxide (37.3%), Xylene (1-1%*@), 1,2,4-Trimethyl Benzene (1-4%*)

GAL WT: 13.44 WT PCT SOLIDS: 80.35 VOL PCT SOLIDS: 64.67

SOLVENT DENSITY: 7.48 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63326P Aromatic Hydrocarbon-B (5.4%), Barium Sulfate (7.2%), Bisphenol Epichlorohydrin Type Polymer (29.4%), Carbon Black (0.2%), Diacetone Alcohol (6.8%), Ethylbenzene (0.1-0.2%*@), Hydrous Magnesium Silicate (4.0%), Titanium Dioxide (36.3%), Xylene (1-1%*@), 1,2,4-Trimethyl Benzene (1-4%*)

GAL WT: 13.46 WT PCT SOLIDS: 80.56 VOL PCT SOLIDS: 65.08

SOLVENT DENSITY: 7.50 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63526P Aromatic Hydrocarbon-B (5.8%), Barium Sulfate (6.7%), Bisphenol Epichlorohydrin Type Polymer (30.8%), Diacetone Alcohol (6.9%), Ethylbenzene (0.1-0.2%*@), Hydrous Magnesium Silicate (4.1%), Titanium Dioxide (36.7%), Xylene (1-1%*@), 1,2,4-Trimethyl Benzene (1-4%*)

GAL WT: 13.38 WT PCT SOLIDS: 80.63 VOL PCT SOLIDS: 65.33

SOLVENT DENSITY: 7.48 VOC LE: 2.6 VOC AP: 2.6 FLASH POINT: 100 deg F - 141 deg F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

LF-63726P Aromatic Hydrocarbon-B (5.7%), Barium Sulfate (6.7%), Bisphenol Epichlorohydrin Type Polymer (31.2%), Diacetone Alcohol (6.8%), Ethylbenzene

MSDS DIC 7

EPOXY PRIMERS, ENAMELS, AND ACTIVATORS

July, 2001

Silicate (12.7%), Isopropyl Alcohol (3.7%), N-Butyl Alcohol (5.7%*), Propylene Glycol Monomethyl Ether Acetate (10.0%), Titanium Dioxide (17.1%), Toluene (5.1%*@)

GAL WT: 11.79 WT PCT SOLIDS: 67.44 VOL PCT SOLIDS: 47.60

SOLVENT DENSITY: 7.32 VOC LE: 3.8 VOC AP: 3.8 FLASH POINT: 20 deg F to below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

823Y67635 Barium Sulfate (9.6%), Bisphenol A/Epichlorohydrin Polymer (25.3%), Ethyl Acetate (6.8%), Hydrous Magnesium Silicate (13.2%), Isopropyl Alcohol (3.5%), N-Butyl Alcohol (5.6%*), Propylene Glycol Monomethyl Ether Acetate (10.2%), Titanium Dioxide (17.8%), Toluene (4.9%*@)

GAL WT: 11.93 WT PCT SOLIDS: 67.85 VOL PCT SOLIDS: 47.71

SOLVENT DENSITY: 7.33 VOC LE: 3.8 VOC AP: 3.8 FLASH POINT: 20 deg F to below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

823Y67637 Barium Sulfate (9.7%), Bisphenol A/Epichlorohydrin Polymer (25.3%), Ethyl Acetate (6.9%), Hydrous Magnesium Silicate (13.2%), Isopropyl Alcohol (3.5%), N-Butyl Alcohol (5.6%*), Propylene Glycol Monomethyl Ether Acetate (10.2%), Titanium Dioxide (17.9%), Toluene (4.9%*@)

GAL WT: 11.91 WT PCT SOLIDS: 67.74 VOL PCT SOLIDS: 47.63

SOLVENT DENSITY: 7.33 VOC LE: 3.8 VOC AP: 3.8 FLASH POINT: 20 deg F to below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VF-333 Barium Sulfate (12.0%), Bisphenol-Epichlorohydrin Type Polymer (19.4%), Diisobutyl Ketone (4.3%), Ethyl Acetate (3.4%), Ethylene Glycol Monobutylether (12.4%*@), Hydrous Magnesium Silicate (10.4%), Kaolin (11.8%), Methyl Ethyl Ketone (2.8%*@), Phenolic Polymer (8.0%), Titanium Dioxide (9.4%), Urea Formaldehyde Resin (1.1%), 4,6-Dimethyl-2-Heptanone (1.1%)

GAL WT: 12.03 WT PCT SOLIDS: 74.67 VOL PCT SOLIDS: 57.59

SOLVENT DENSITY: 7.17 VOC LE: 3.0 VOC AP: 3.0 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VF-455 Barium Sulfate (11.7%), Bisphenol-Epichlorohydrin Type Polymer (19.1%), Ethyl Acetate (3.2%), Hydrous Magnesium Silicate (9.5%), Kaolin (11.6%), Methyl Ethyl Ketone (11.0%*@), Phenolic Polymer (7.5%), Titanium Dioxide (9.2%), Toluene (11.8%*@), Urea Formaldehyde Resin (1.1%)

GAL WT: 11.64 WT PCT SOLIDS: 72.36 VOL PCT SOLIDS: 54.10

SOLVENT DENSITY: 7.01 VOC LE: 3.2 VOC AP: 3.2 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VF-525 Bisphenol-Epichlorohydrin Type Polymer (36.0%), Ethyl Acetate (6.4%), Hydrous Magnesium Silicate (27.9%), N-Butyl Alcohol (2.4%*), Phenolic Polymer (14.9%), Toluene (10.0%*@)

GAL WT: 10.69 WT PCT SOLIDS: 80.89 VOL PCT SOLIDS: 71.84

SOLVENT DENSITY: 7.24 VOC LE: 2.0 VOC AP: 2.0 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VF-026 Acrylic Polymer-B (10.2%), Amidoamine Resin-B (20.9%), Amine Salt of Polycarbonic Acid (1.0%), Amorphous Silica Fumed (2.0%), Aromatic Hydrocarbon-A (1.0%), Aromatic Hydrocarbon-B (10.4%), Calcium Phosphosilicate (3.7%), Glycidyl Ester Of Tert Carboxylic Acid (10.7%), Hydrous Magnesium Silicate (5.6%), Kaolin (3.8%), Methyl Ethyl Ketone (9.0%*@), Mica (9.4%), N-Butyl Alcohol (3.1%*), Quartz-Crystalline Silica (0.5%), 1,2,4-Trimethyl Benzene (2.7%*), 2,4,6-Dimethylaminomethyl Phenol (2.2%)

GAL WT: 9.27 WT PCT SOLIDS: 70.45 VOL PCT SOLIDS: 60.91 SOLVENT DENSITY: 7.00 VOC LE: 2.7 VOC AP: 2.7 FLASH POINT: 20 deg F to

below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VG-026 Acrylic Polymer-B (25.6%), Amidoamine Resin-B (23.0%), Aromatic Hydrocarbon-B (11.3%), Cumene (0-1%*@), Glycidyl Ester Of Tert Carboxylic Acid (11.8%), Methyl Ethyl Ketone (11.6%*@), N-Butyl Alcohol (7.7%*), 1,2,4-Trimethyl Benzene (2-8%*), 2,4,6-Dimethylaminomethyl Phenol (2.4%)

GAL WT: 7.86 WT PCT SOLIDS: 62.79 VOL PCT SOLIDS: 58.04 SOLVENT

DENSITY: 6.94 VOC LE: 2.9 VOC AP: 2.9 FLASH POINT: 20 deg F to below 73 deg F H: 3 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

525-450 Bisphenol-Epichlorohydrin Type Polymer (24.7%), Calcium Carbonate (6.3%), Hydrous Magnesium Silicate (26.0%), Methyl Isobutyl Ketone (9.9%*@), Organoclay (2.3%), Quartz-Crystalline Silica (2.7%), Titanium Dioxide (9.0%), Toluene (9.2%*@), Xylene (8.2%*@)

GAL WT: 11.88 WT PCT SOLIDS: 72.66 VOL PCT SOLIDS: 53.62

SOLVENT DENSITY: 7.00 VOC LE: 3.2 VOC AP: 3.2 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

525-451 Bisphenol-Epichlorohydrin Type Polymer (24.7%), Calcium Carbonate (6.3%), Hydrous Magnesium Silicate (26.0%), Methyl Isobutyl Ketone (9.9%*@), Organoclay (2.3%), Quartz-Crystalline Silica (2.7%), Titanium Dioxide (9.0%), Toluene (9.2%*@), Xylene (8.2%*@)

GAL WT: 11.88 WT PCT SOLIDS: 72.66 VOL PCT SOLIDS: 53.62

SOLVENT DENSITY: 7.0 VOC LE: 3.2 VOC AP: 3.2 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VG-400 Polyamide Resin (56.5%), Toluene (19.3%*@), Xylene (24.2%*@)

GAL WT: 7.69 WT PCT SOLIDS: 56.46 VOL PCT SOLIDS: 53.64 SOLVENT

DENSITY: 7.22 VOC LE: 3.3 VOC AP: 3.3 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 1 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

525-2420 Bisphenol-Epichlorohydrin Type Polymer (48.6%), Hydrous Magnesium Silicate (39.6%), Para-Nonylphenol (4.9%), 2-Ethylhexyl Glycidyl Ether (4.7%)

GAL WT: 12.30 WT PCT SOLIDS: 99.05 VOL PCT SOLIDS: 98.21

SOLVENT DENSITY: 6.59 VOC LE: 0.1 VOC AP: 0.1 FLASH POINT: Above 200 deg F H: 1 F: 1 R: 0 OSHA STORAGE: IIIB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: NO

FG-090 Amido Amine (47.3%*), Ethylbenzene (0.4-1.1%*@), Organophilic Clay (2.0%), Quartz-Crystalline Silica (44.0%), Xylene(3-4%*@), 2,4,6-Dimethylaminomethyl Phenol (2.4%)

GAL WT: 11.11 WT PCT SOLIDS: 95.69 VOL PCT SOLIDS: 93.34

SOLVENT DENSITY: 7.19 VOC LE: 0.5 VOC AP: 0.5 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IA TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES

VF-335 Barium Sulfate (11.9%), Bisphenol-Epichlorohydrin Type Polymer (19.2%), Carbon Black (0.1%), Ethyl Acetate (3.1%), Hydrous Magnesium Silicate (10.3%), Kaolin (11.7%), Methyl Ethyl Ketone (8.6%*@), Phenolic Polymer (7.9%), Titanium Dioxide (9.3%), Toluene (11.7%*@), Urea Formaldehyde Resin (1.1%)

GAL WT: 11.85 WT PCT SOLIDS: 74.30 VOL PCT SOLIDS: 56.71

SOLVENT DENSITY: 7.03 VOC LE: 3.0 VOC AP: 3.0 FLASH POINT: 20 deg F to below 73 deg F H: 2 F: 3 R: 0 OSHA STORAGE: IB TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: YES