MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG/Porter Paints
400 South 13th Street
Louisville, KY 40203

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.) (24 hours/day):
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-3889090 (China)

TECHNICAL INFORMATION: (866) 823-2585

PRODUCT SAFETY/MSDS INFORMATION: (412) 492-5555 7:00 a.m. - 4:30 p.m. EST

Product ID: PP9373A (0878)
PRODUCT NAME: DURA-GLAZE WATER EPOXY -D
SYNONYMS: None
ISSUE DATE: 10/14/2004
EDITION NO.: 1
CHEMICAL FAMILY: Epoxy

EMERGENCY OVERVIEW:

CAUSES SEVERE EYE IRRITATION. CAUSES PRIMARY SKIN IRRITATION. MAY BE ABSORBED THROUGH THE SKIN. PROLONGED OR REPEATED CONTACT MAY CAUSE AN ALLERGIC SKIN REACTION.VAPOR AND/OR SPRAY MIST MAY BE HARMFUL IF INHALED.HARMFUL IF SWALLOWED. This product is not expected to present any unusual hazards under fire or spill conditions. Read entire MSDS before use.

SECTION 2 - COMPOSITION INFORMATION

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

Material/ CAS Number	Percent	Hazardous
EPOXY RESIN 25068-38-6	40 - 70	X
2-PROPOXYETHANOL 2807-30-9	5 - 10	X

SECTION 3 - HAZARDS IDENTIFICATION

ACUTE OVEREXPOSURE EFFECTS

EYE CONTACT:
Causes severe eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT:
Causes primary skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:
May be absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

INHALATION:
Vapor and/or spray mist may be harmful if inhaled.

INGESTION:
Harmful if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:
Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

CHRONIC OVEREXPOSURE EFFECTS
Avoid long-term and repeated contact.
Repeated exposure to vapors above recommended exposure limits (see Section 8) may cause irritation of the respiratory system and permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.
The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

SECTION 4 - FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

EYE CONTACT:
Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary.

SKIN CONTACT:
Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INHALATION:
Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

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INGESTION:
Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASHPOINT: >200 Degrees F (> 93 Degrees C)
FLASHPOINT TEST METHOD:
Pensky-Martens Closed Cup
UEL: Not Available.
LEL: Not Available.
AUTOIGNITION TEMPERATURE:
Not Available.
EXTINGUISHING MEDIA:
Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or universal aqueous film forming foam) designed to extinguish NFPA Class IIIB combustible liquid fires.

PROTECTION OF FIREFIGHTERS:
Water spray may be ineffective. Water spray may be used to cool closed containers that are exposed to extreme heat. If water is used, fog nozzles are preferable. Firefighters should wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers may explode or burst (due to the build-up of steam pressure) when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

STORAGE:
Protect from freezing.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS:
Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

PERSONAL PROTECTIVE EQUIPMENT

EYES:
Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

SKIN/GLOVES:
Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: neoprene rubber or nitrile rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.

RESPIRATOR:
Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH- approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS
If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

Key: OSHA=Occupational Safety and Health Administration; PEL=Permissable Exposure Limit; Ceiling=PEL Ceiling Limit; STEL=PEL Short-Term Exposure Limit; Skin=OSHA Skin Designation.

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
2-PROPOXYETHANOL 2807-30-9	5 - 10	S- 25 PPM	Not established	25 PPM	Not established

Key: ACGIH=American Conference of Governmental Industrial Hygienists; OSHA=Occupational Safety and Health Administration; TLV=Threshold Limit Value; TWA=Time Weighted Average; PEL=Permissible Exposure Limit; IPEL=Internal Permissible Exposure Limit; Ceiling=TLV or PEL Ceiling Limit; STEL=TLV or PEL Short-Term Exposure Limit; Skin= Skin Absorption Designation. [C- Ceiling Limit; S- Potential Skin Aborption; R-Respirable Dust]
Additional Information Not applicable.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

(FORMULA VALUES, NOT SALES SPECIFICATIONS)

SPECIFIC GRAVITY:	1.075
PHYSICAL STATE:	Liquid
Percent Solids:	45.53
Percent Volatile by Volume:	59.500
pH:	Not available.
ODOR THRESHOLD:	Not available.
Vapour Pressure (mm Hg):	16.9 mmHg
ODOR/APPEARANCE:	Viscous liquid with an odor characteristic of the chemical family and any solvents listed in Section 2.
VAPOR DENSITY:	HEAVIER THAN AIR
Evaporation Rate:	34
BOILING POINT OR RANGE:	212 - 489Degrees F
Freezing Point or Range:	Not Applicable.
Melting Point or Range(°C):	Not Applicable.
Octanol/Water Partition Coefficient:	Not Applicable.
WEIGHT PER GALLON:	8.96 (U.S.) / 10.7 (IMPERIAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
This product is normally stable and will not undergo hazardous reactions.

CONDITIONS TO AVOID:
None Known.

INCOMPATIBLE MATERIALS:
Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

HAZARDOUS POLYMERIZATION:
None Known.

HAZARDOUS DECOMPOSITION PRODUCTS:
- Carbon monoxide - Carbon dioxide - Lower molecular weight polymer fractions

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Material/ CAS Number	Percent	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)
2-PROPOXYETHANOL 2807-30-9	5 - 10	3.09 g/kg	1.34 g/kg	Not Available

CHRONIC TOXICITY
Target Organs:
- Bone marrow and blood tissues - Blood - Kidney - Liver - Brain - Central nervous system - Lung

Mutagenicity:
This has not been tested for this product.
Reproductive:
This has not been tested for this product.

SUPPLEMENTAL HEALTH INFORMATION:

Material/ CAS Number	Percent	Ingredient Specific Animal Data:
2-PROPOXYETHANOL 2807-30-9	5 - 10	This product contains an ethylene series glycol ether and/or acetate which has been shown to cause adverse effects on the kidneys, liver, blood and/or blood-forming tissue.

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS:
Ecotoxicity No data available

ENVIRONMENTAL FATE
Mobility: No Information Available.
Biodegradation: No Information Available.
Bioaccumulation No data available

PHYSICAL/CHEMICAL

Hydrolysis: No Information Available.
Photolysis: No Information Available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.
Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Paint- Non-Regulated Goods
NOS Technical Name: None
Hazard Class: None
Subsidiary Class(es): None
UN Number: None
Packing Group: None

USA - RQ Hazardous Substances: None
USA-RQ Hazardous Substance None
Threshold Ship Weight:
Marine Pollutant Name: None

SECTION 15 - REGULATORY INFORMATION

INVENTORY STATUS
U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.
FEDERAL REGULATIONS
US Regulations

Material/ CAS Number	Percent	CERCLA HS - RQ (LBS)	SARA EHS-TPQ (LBS)	SARA 313
EPOXY RESIN 25068-38-6	40 - 70	Not Listed	Not Listed	Not Listed
2-PROPOXYETHANOL 2807-30-9	5 - 10	Not Listed	Not Listed	Not Listed

SARA 311/312
Health (acute): Yes
Health (chronic): Yes
Fire (flammable): No
Pressure: No
Reactivity: No
WHMIS HAZARD CLASS: - Class D, Division 2, Subdivision A - Class D, Division 2, Subdivision B

STATE/PROVINCIAL REGULATIONS
Additional Information
Key: IARC- International Agency on the Research of Cancer; ACGIH-American Conference of Governmental Industrial Hygienists; NTP-National Toxicology Program *Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA-Occupational Safety and Health Administration.

SECTION 16 - OTHER INFORMATION

Hazard Rating Systems
NFPA Rating: 2 10
HMIS Rating: 2*10

Rating System: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.

HMIS=Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

PREPARED BY: Product Safety Department
REASON FOR REVISION: Date. Edition.
Updated MSDS
format.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations.
Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.
PP9373A 000001 (00308703.001)(10/13/04)
031203, 000, 0878

*** END OF MSDS ***

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MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG/Porter Paints
400 South 13th Street
Louisville, KY 40203

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.) (24 hours/day):
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-3889090 (China)

TECHNICAL INFORMATION: (866) 823-2585

PRODUCT SAFETY/MSDS INFORMATION: (412) 492-5555 7:00 a.m. - 4:30 p.m. EST

Product ID: PP9373B (0878)
PRODUCT NAME: DURA-GLAZE WATER EPOXY -D
SYNONYMS: None
ISSUE DATE: 10/14/2004
EDITION NO.: 1
CHEMICAL FAMILY: Polyamide

EMERGENCY OVERVIEW:

Combustible. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke.CAUSES SEVERE EYE IRRITATION. CAUSES PRIMARY SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. PROLONGED OR REPEATED CONTACT MAY CAUSE AN ALLERGIC SKIN REACTION.VAPOR AND/OR SPRAY MIST HARMFUL IF INHALED. VAPOR IRRITATES EYES, NOSE, AND THROAT. MAY CAUSE IRRITATION AND/OR ALLERGIC RESPIRATORY REACTION IN LUNGS.HARMFUL OR FATAL IF SWALLOWED.

SECTION 2 - COMPOSITION INFORMATION

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

Material/ CAS Number	Percent	Hazardous
CALCIUM CARBONATE 1317-65-3	10 - 30	X
TITANIUM DIOXIDE 13463-67-7	10 - 30	X
POLYAMIDOAMINE EPOXY ADDUCT 68155-17-9	5 - 10	X
POLYAMIDOAMINE EPOXY ADDUCT 68424-41-9	5 - 10	X
2-BUTOXY ETHANOL 111-76-2	5 - 10	X
TOLUENE 108-88-3	1 - 5	X
2-PROPOXYETHANOL 2807-30-9	1 - 5	X
QUARTZ 14808-60-7	0.1-1.0	X

SECTION 3 - HAZARDS IDENTIFICATION

ACUTE OVEREXPOSURE EFFECTS

EYE CONTACT:
Causes severe eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT:
Causes primary skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:
May be harmful if absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

INHALATION:
Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat. May cause irritation and/or allergic respiratory reaction in lungs.

INGESTION:
Harmful or fatal if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:
Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

CHRONIC OVEREXPOSURE EFFECTS
Avoid long-term and repeated contact.
Repeated exposure to vapors above recommended exposure limits (see Section 8) may cause irritation of the respiratory system and permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. This product contains crystalline silica which has been classified as a human carcinogen by IARC. Long-term exposures may also lead to a disabling lung condition known as silicosis. The risk depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Use of appropriate personal protective equipment and/or engineering controls should be employed whenever these types of operations are being performed. This product contains toluene. Toluene inhalation in animals (greater than 1500 ppm) and intentional inhalation of toluene-containing products by humans (e.g. glue) has caused adverse fetal development effects.
The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

SECTION 4 - FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

EYE CONTACT:
Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary.

SKIN CONTACT:
Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INHALATION:
Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

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INGESTION:
Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASHPOINT: 108 Degrees F (42 Degrees C)
FLASHPOINT TEST METHOD:
Pensky-Martens Closed Cup
UEL: Not Available.
LEL: Not Available.
AUTOIGNITION TEMPERATURE:
Not Available.
EXTINGUISHING MEDIA:
Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class II combustible liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.
PROTECTION OF FIREFIGHTERS:
Fire-fighters should wear self-contained breathing apparatus and full protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:
Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.
STORAGE:
Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS:
Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

PERSONAL PROTECTIVE EQUIPMENT
EYES:
Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.
SKIN/GLOVES:
Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: impermeable material. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.
RESPIRATOR:
Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH- approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.
GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS
If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

Material/ CAS Number	Percent	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
CALCIUM CARBONATE 1317-65-3	10 - 30	Not established	Not established	R- 5 mg/m^3	Not established
TITANIUM DIOXIDE 13463-67-7	10 - 30	10 mg/m^3	Not established	10 mg/m^3	Not established
2-BUTOXY ETHANOL 111-76-2	5 - 10	20 PPM	Not established	S- 25 ppm	Not established
TOLUENE 108-88-3	1 - 5	S- 50 ppm	Not established	100 ppm	150 ppm
QUARTZ 14808-60-7	0.1-1.0	R- 0.05 MG/m^3	Not established	R- 0.1 mg/m^3	Not established

Key: OSHA=Occupational Safety and Health Administration; PEL=Permissable Exposure Limit; Ceiling=PEL Ceiling Limit; STEL=PEL Short-Term Exposure Limit; Skin=OSHA Skin Designation.

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
CALCIUM CARBONATE 1317-65-3	10 - 30	R- 10 MG/m^3	Not established	Not established	Not established
TITANIUM DIOXIDE 13463-67-7	10 - 30	10 mg/m^3	Not established	Not established	Not established
2-BUTOXY ETHANOL 111-76-2	5 - 10	R-S-20 PPM	Not established	Not established	Not established
TOLUENE 108-88-3	1 - 5	R- 50 PPM	Not established	Not established	Not established
2-PROPOXYETHANOL 2807-30-9	1 - 5	S- 25 PPM	Not established	25 PPM	Not established
QUARTZ 14808-60-7	0.1-1.0	R- 0.10 MG/m^3	Not established	Not established	Not established

Key: ACGIH=American Conference of Governmental Industrial Hygienists; OSHA=Occupational Safety and Health Administration; TLV=Threshold Limit Value; TWA=Time Weighted Average; PEL=Permissible Exposure Limit; IPEL=Internal Permissible Exposure Limit; Ceiling=TLV or PEL Ceiling Limit; STEL=TLV or PEL Short-Term Exposure Limit; Skin= Skin Absorption Designation. [C- Ceiling Limit; S-Potential Skin Aborption; R-Respirable Dust]
Additional Information Not applicable.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

(FORMULA VALUES, NOT SALES SPECIFICATIONS)

SPECIFIC GRAVITY: 1.337
PHYSICAL STATE: Liquid
Percent Solids: 56.05
Percent Volatile by Volume: 60.620
pH: Not available.
ODOR THRESHOLD: Not available.
Vapour Pressure (mm Hg): 16.8 mmHg
ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.
VAPOR DENSITY: HEAVIER THAN AIR
Evaporation Rate: 43
BOILING POINT OR RANGE: 212 - 489Degrees F
Freezing Point or Range: Not Applicable.
Melting Point or Range(°C): Not Applicable.
Octanol/Water Partition Coefficient: Not Applicable.
WEIGHT PER GALLON: 11.14 (U.S.) / 13.3 (IMPERIAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
This product is normally stable and will not undergo hazardous reactions.
CONDITIONS TO AVOID:
None Known.
INCOMPATIBLE MATERIALS:
Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.
HAZARDOUS POLYMERIZATION:
None Known.
HAZARDOUS DECOMPOSITION PRODUCTS:
- Carbon monoxide - Carbon dioxide - Oxides of nitrogen - Lower molecular weight polymer fractions - Silicon oxides

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Material/ CAS Number	Percent	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)
2-BUTOXY ETHANOL 111-76-2	5 - 10	.47 g/kg	.22 g/kg	2.18 mg/L. 4 h
TOLUENE 108-88-3	1 - 5	5.00 g/kg	12.12 g/kg	Not Available
2-PROPOXYETHANOL 2807-30-9	1 - 5	3.09 g/kg	1.34 g/kg	Not Available

CHRONIC TOXICITY
Target Organs:
- Respiratory sensitizer - Teratogen - Carcinogen - Bone marrow and blood tissues - Blood - Kidney - Liver - Brain - Central nervous system - Lung

Mutagenicity:
This has not been tested for this product.
Reproductive:
This has not been tested for this product.

SUPPLEMENTAL HEALTH INFORMATION:

Material/ CAS Number	Percent	Ingredient Specific Animal Data:
TITANIUM DIOXIDE 13463-67-7	10 - 30	This product contains titanium dioxide. Animals inhaling massive quantities of titanium dioxide dust in a long-term study developed lung tumors. Studies with humans involved in manufacture of this pigment indicate no increased risk of cancer from exposure.
2-BUTOXY ETHANOL 111-76-2	5 - 10	This product contains an ethylene series glycol ether and/or acetate which has been shown to cause adverse effects on the kidneys, liver, blood and/or blood-forming tissue. In a two-year NTP inhalation study, there was no significant increase in the incidence of any type of tumor in rats exposed to 2-butoxy ethanol at concentrations up to 125 ppm except a questionable trend in the incidence of adrenal gland tumors in female rats. When mice were exposed to concentrations of 62.5, 125, and 250 ppm, there was some evidence of carcinogenicity found in the liver of male mice and the forestomach of female mice at 250 ppm.
2-PROPOXY ETHANOL 2807-30-9	1 - 5	This product contains an ethylene series glycol ether and/or acetate which has been shown to cause adverse effects on the kidneys, liver, blood and/or blood-forming tissue.

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS:
Ecotoxicity No data available

ENVIRONMENTAL FATE
Mobility: No Information Available.
Biodegradation: No Information Available.
Bioaccumulation No data available

PHYSICAL/CHEMICAL

Hydrolysis: No Information Available.
Photolysis: No Information Available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.

Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Paint
NOS Technical Name: None
Hazard Class: 3
Subsidiary Class(es): None
UN Number: UN1263
Packing Group: III

USA - RQ Hazardous Substances: Toluene
USA-RQ Hazardous Substance Threshold Ship Weight: Toluene>39682.94 Pounds
Marine Pollutant Name: None

USA and Canada Shipments Only- Combustible Liquid Exception: Non-bulk (<=119 Gallons/450 L) ground shipments can be reclassified to "not regulated" for transportation. Bulk shipments - USA Only (> 119 Gallons/450 L) can be reclassified to a Combustible Liquid.

USA Shipments Only - RQ Threshold Ship Weight: This is the total weight of this product that must be shipped to exceed the RQ quantity.

SECTION 15 - REGULATORY INFORMATION

INVENTORY STATUS

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

FEDERAL REGULATIONS

US Regulations

Material/ CAS Number	Percent	CERCLA HS - RQ (LBS)	SARA EHS-TPQ (LBS)	SARA 313
CALCIUM CARBONATE 1317-65-3	10 - 30	Not Listed	Not Listed	Not Listed
TITANIUM DIOXIDE 13463-67-7	10 - 30	Not Listed	Not Listed	Not Listed
POLYAMIDOAMINE EPOXY ADDUCT 68155-17-9	5 - 10	Not Listed	Not Listed	Not Listed
POLYAMIDOAMINE EPOXY ADDUCT 68424-41-9	5 - 10	Not Listed	Not Listed	Not Listed
2-BUTOXY ETHANOL 111-76-2	5 - 10	Not Listed	Not Listed	Not Listed
TOLUENE 108-88-3	1 - 5	1000 lbs	Not Listed	Listed
2-PROPOXYETHANOL 2807-30-9	1 - 5	Not Listed	Not Listed	Not Listed
QUARTZ 14808-60-7	0.1-1.0	Not Listed	Not Listed	Not Listed

SARA 311/312

Health (acute): Yes
Health (chronic): Yes
Fire (flammable): Yes
Pressure: No
Reactivity: No

WHMIS HAZARD CLASS: - Class B, Division 3 - Class D, Division 2, Subdivision A - Class D, Division 2, Subdivision B - Class D, Division 1, Subdivision B

STATE/PROVINCIAL REGULATIONS

CALIFORNIA PROP. 65: WARNING: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

Additional Information

Material/ CAS Number	Percent	IARC Group 1(Known Human Carc.)	IARC Group 2A (Probable Carc.)	IARC 2B (Suspected Carc.)	ACGIH Carc.	NTP Known Carc.	OSHA Carc.
QUARTZ 14808-60-7	0.1-1.0	Y	N	N	Y	N	Y

Key: IARC- International Agency on the Research of Cancer; ACGIH-American Conference of Governmental Industrial Hygienists; NTP-National Toxicology Program *Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA-Occupational Safety and Health Administration.

SECTION 16 - OTHER INFORMATION

Hazard Rating Systems
NFPA Rating: 3 20
HMIS Rating: 3*20

Rating System: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.

HMIS=Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

PREPARED BY: Product Safety Department
REASON FOR REVISION: Date. Edition.
Updated MSDS format.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations.
Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.
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*** END OF MSDS ***

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