Shopline Single Stage Urethane Paint

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.) (24 hours/day):
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-83889090 (China)

TECHNICAL INFORMATION: (740) 363-9610 (DELAWARE, OH) 8:00 a.m. - 5:00 p.m. EST

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

Product ID: JAU-1 (0808-T0)
PRODUCT NAME: DIRECT GLOSS ACRYLIC URETHANE
SYNONYMS: None
ISSUE DATE: 04/22/2008
EDITION NO.: 3
CHEMICAL FAMILY: ALKYD POLYESTER

EMERGENCY OVERVIEW:

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone.CAUSES SEVERE EYE IRRITATION. MAY CAUSE MODERATE SKIN IRRITATION. MAY BE ABSORBED THROUGH THE SKIN.VAPOR AND/OR SPRAY MIST MAY BE HARMFUL IF INHALED. VAPOR IRRITATES EYES, NOSE, AND THROAT.HARMFUL IF SWALLOWED. STABLE - HAZARDOUS REACTIONS POSSIBLE AT EXTREMELY HIGH TEMPERATURES/PRESSURES.

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	
TITANIUM DIOXIDE 13463-67-7	40 - 70	X	
XYLENES 1330-20-7	15 - 40	X	
METHYL (N-AMYL) KETONE 110-43-0	10 - 30	X	
ETHYL BENZENE 100-41-4	3 - 7	X	
ALUMINUM POWDER 7429-90-5	3 - 7	X	
TOLUENE 108-88-3	1 - 5	X	
CARBON BLACK 1333-86-4	1 - 5	X	
AROMATIC NAPHTHA 64742-95-6	1 - 5	X	
NAPHTHA 8052-41-3	1 - 5	X	
N-BUTYL ACETATE 123-86-4	1 - 5	X	
TITANIUM DIOXIDE 1317-80-2	1 - 5	X	
METHYL ETHYL KETONE 78-93-3	0.5-1.5	X	
ACETONE 67-64-1	0.5-1.5	X	
(As Nuisance Particulates) 1317-80-2	*	X	See Sections 8 and 15 for information.

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:
May cause moderate skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:
May be absorbed through the skin.

INHALATION:
Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat.

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. 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. It has been reported in occupational studies that inhalation exposures to toluene are associated with reproductive effects including spontaneous abortion. However, the methodology and reliability of the results for the studies are questionable. Several other occupational studies indicated that toluene exposure has been associated with impaired color vision. High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo and fetus. These effects were often at levels toxic to the mother.
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.

INGESTION:
Gently wipe or rinse the inside of the mouth with water. Sips of water may be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room or physician right away as further treatment may be necessary.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
FLASHPOINT: 74 Degrees F (23 Degrees C)
FLASHPOINT TEST METHOD:
Pensky-Martens Closed Cup
UEL: Not Available.
LEL: 1.5
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 IC flammable 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:
When this product is used, the overspray and other combustible materials such as paint booth filters, rags, masking materials, etc., contaminated by coating material are subject to spontaneous combustion. Wetting the contaminated materials and not packing them tightly together in refuse containers will minimize the potential for this to occur. 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 IC flammable 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 and full face shield 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: 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.

Material/ CAS Number	Percent	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
TITANIUM DIOXIDE 13463-67-7	40 - 70	10 mg/m³	Not established	10 mg/m³	Not established
XYLENES 1330-20-7	15 - 40	100 ppm	150 PPM	100 ppm	150 ppm
METHYL (N-AMYL) KETONE 110-43-0	10 - 30	50 ppm	Not established	100 ppm	Not established
ETHYL BENZENE 100-41-4	3 - 7	100 ppm	125 ppm	100 ppm	125 ppm
ALUMINUM POWDER 7429-90-5	3 - 7	10 MG/m³	Not established	R- 5 mg/m³	Not established
TOLUENE 108-88-3	1 - 5	20 PPM	Not established	100 ppm	150 ppm
CARBON BLACK 1333-86-4	1 - 5	3.5 mg/m³	Not established	3.5 mg/m³	Not established
NAPHTHA 8052-41-3	1 - 5	100 ppm	Not established	100 ppm	Not established
N-BUTYL ACETATE 123-86-4	1 - 5	150 PPM	200 ppm	150 ppm	200 ppm
METHYL ETHYL KETONE 78-93-3	0.5-1.5	200 ppm	300 ppm	200 ppm	300 ppm
ACETONE 67-64-1	0.5-1.5	500 ppm	750 ppm	750 ppm	1000 ppm
(As Nuisance Particulates) 1317-80-2	*	R- 3 MG/m³	Not established	R- 5 mg/m³	Not established

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
TITANIUM DIOXIDE 13463-67-7	40 - 70	10 MG/m³	Not established	Not established	Not established
XYLENES 1330-20-7	15 - 40	100 ppm	150 ppm	Not established	Not established
METHYL (N-AMYL) KETONE 110-43-0	10 - 30	25 ppm	Not established	Not established	Not established
ETHYL BENZENE 100-41-4	3 - 7	100 PPM	125 PPM	Not established	Not established
ALUMINUM POWDER 7429-90-5	3 - 7	10 MG/m³	10 MG/m³	Not established	Not established
TOLUENE 108-88-3	1 - 5	50 PPM	Not established	Not established	Not established
CARBON BLACK 1333-86-4	1 - 5	3.5 mg/m³	Not established	Not established	Not established
NAPHTHA 8052-41-3	1 - 5	525 MG/m³	Not established	Not established	Not established
N-BUTYL ACETATE 123-86-4	1 - 5	150 ppm	200 ppm	Not established	Not established
METHYL ETHYL KETONE 78-93-3	0.5-1.5	200 ppm	300 ppm	Not established	Not established
ACETONE 67-64-1	0.5-1.5	500 PPM	750 PPM	Not established	Not established
(As Nuisance Particulates) 1317-80-2	*	R- 3 MG/m³	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 (1989 Vacated values); 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 Absorption; R-Respirable Dust]
Additional Information Not applicable.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

(FORMULA VALUES, NOT SALES SPECIFICATIONS)

SPECIFIC GRAVITY:	1.056
PHYSICAL STATE:	Liquid
Percent Solids:	40-71
Percent Volatile by Volume:	54-65
pH:	Not available.
ODOR THRESHOLD:	Not available.
Vapour Pressure:	<8.0 mmHg
ODOR/APPEARANCE:	Viscous liquid with an odor characteristic of the solvents listed in Section 2.
VAPOR DENSITY:	HEAVIER THAN AIR
Evaporation Rate:	<82
BOILING POINT OR RANGE:	172- 399Degrees F
Freezing Point or Range:	Not Applicable.
Melting Point or Range(°C):	Not Applicable.
Partition coefficient (n-octanol/water):	Not Applicable.
WEIGHT PER GALLON:	8.80 (U.S.) / 10.5 (IMPERIAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
This product is normally stable but may undergo hazardous reactions at extremely high temperatures and pressures.
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 aluminum - 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)
TITANIUM DIOXIDE 13463-67-7	40 - 70	10.00 g/kg	Not Available	Not Available
XYLENES 1330-20-7	15 - 40	4.30 g/kg	1.70 g/kg	21.88 mg/l 4 hr
METHYL (N-AMYL) KETONE 110-43-0	10 - 30	1.60 g/kg	10.21 g/kg	Not Available
ETHYL BENZENE 100-41-4	3 - 7	3.50 g/kg	17.80 g/kg	Not Available
TOLUENE 108-88-3	1 - 5	.64 g/kg	8.39 g/kg	12.50 mg/l 4 hr
CARBON BLACK 1333-86-4	1 - 5	15.40 g/kg	3.00 g/kg	Not Available
AROMATIC NAPHTHA 64742-95-6	1 - 5	8.40 g/kg	3.48 g/kg	5.20 mg/l 4 hr
NAPHTHA 8052-41-3	1 - 5	5.00 g/kg	Not Available	5.50 mg/l 4 hr
N-BUTYL ACETATE 123-86-4	1 - 5	10.77 g/kg	17.60 g/kg	Not Available
METHYL ETHYL KETONE 78-93-3	0.5-1.5	2.74 g/kg	13.00 g/kg	Not Available
ACETONE 67-64-1	0.5-1.5	1.80 g/kg	20.00 g/kg	76.00 mg/l 4 hr

CHRONIC TOXICITY
Ingredient Target Organ/Chronic Effects:
- Kidney - Liver - Carcinogen - Ear - Embryotoxin - Teratogen - Brain - Central nervous system - Lung

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

SUPPLEMENTAL HEALTH INFORMATION:

Material/ CAS Number	Percent	Ingredient Specific Animal Data:
TITANIUM DIOXIDE 13463-67-7	40 - 70	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.
ETHYL BENZENE 100-41-4	3 - 7	Ethylbenzene has been reported by NTP to cause cancer in laboratory animals following a chronic (2 year) inhalation exposure. Dose levels of 75, 250 and 750 ppm were used, with evidence of carcinogenicity found in the kidneys of rats and the lung and liver of mice at 750 ppm. The No Observed Effect Level (NOEL) was 75 ppm. The relevance of these findings to humans is uncertain, but appropriate safeguards should be employed to reduce or eliminate inhalation exposure to ethylbenzene.
CARBON BLACK 1333-86-4	1 - 5	This product contains carbon black which has been rated an IARC 2B carcinogen due to animal data.
TITANIUM DIOXIDE 1317-80-2	1 - 5	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.
METHYL ETHYL KETONE 78-93-3	0.5-1.5	This product contains methyl ethyl ketone (MEK). MEK has been shown to cause minor embryotoxic/fetotoxic effects in laboratory animals exposed for prolonged periods at high concentrations via inhalation. The potential for human exposure to high concentrations is expected to be low due to the irritating effects of MEK at low concentrations.

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS
Ecotoxicity: No Information Available.

ENVIRONMENTAL FATE
Mobility: No information available.
Biodegradation: No information available.
Bioaccumulation: No Information 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: NOT AVAILABLE
NOS Technical Name: NOT AVAILABLE
Hazard Class: N.A.
Subsidiary Class(es): N.A.
UN Number: N.A.
Packing Group: N.A.

USA - RQ Hazardous Substances: NOT AVAILABLE

USA-RQ Hazardous Substance NOT AVAILABLE
Threshold Ship Weight:
Marine Pollutant Name: NOT AVAILABLE

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
TITANIUM DIOXIDE 13463-67-7	40 - 70	Not Listed	Not Listed	Not Listed
XYLENES 1330-20-7	15 - 40	100 lbs	Not Listed	Listed
METHYL (N-AMYL) KETONE 110-43-0	10 - 30	Not Listed	Not Listed	Not Listed
ETHYL BENZENE 100-41-4	3 - 7	1000 lbs	Not Listed	Listed
ALUMINUM POWDER 7429-90-5	3 - 7	Not Listed	Not Listed	Listed
TOLUENE 108-88-3	1 - 5	1000 lbs	Not Listed	Listed
CARBON BLACK 1333-86-4	1 - 5	Not Listed	Not Listed	Not Listed
AROMATIC NAPHTHA 64742-95-6	1 - 5	Not Listed	Not Listed	Not Listed
NAPHTHA 8052-41-3	1 - 5	Not Listed	Not Listed	Not Listed
N-BUTYL ACETATE 123-86-4	1 - 5	5000 lbs	Not Listed	Not Listed
TITANIUM DIOXIDE 1317-80-2	1 - 5	Not Listed	Not Listed	Not Listed
METHYL ETHYL KETONE 78-93-3	0.5-1.5	5000 lbs	Not Listed	Not Listed
ACETONE 67-64-1	0.5-1.5	5000 lbs	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 6 - Class D, Division 2, Subdivision A - Class D, Division 2, 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.
TITANIUM DIOXIDE 13463-67-7	40 - 70	N	N	Y	N	N	N
ETHYL BENZENE 100-41-4	3 - 7	N	N	Y	N	N	Y
CARBON BLACK 1333-86-4	1 - 5	N	N	Y	N	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: 2 31
HMIS Rating: 2*31

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.
JAU-1 000000 (00377119.001)(12/28/05)
051227, 000, 0808

*** END OF MSDS ***