

PPG High Performance Coatings

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 1-800-441-9695 (8:00 am to 5:00 pm ÉST)

INFORMATION:

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

- 4:30 p.m. EST

Product ID: 95-859 (0814)

PRODUCT NAME: PITTHANE 35 COMPONENT B

SYNONYMS: None ISSUE DATE: 02/01/2006

EDITION NO.: 3

CHEMICAL POLYISOCYANATE

FAMILY:

EMERGENCY OVERVIEW:

CAUSES SEVERE EYE IRRITATION. MAY CAUSE MODERATE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY CAUSE AN ALLERGIC SKIN REACTION. VAPOR IRRITATES EYES, NOSE, AND THROAT. MAY CAUSE IRRITATION AND/OR ALLERGIC RESPIRATORY REACTION IN LUNGS. MAY BE 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/	Percent	Hazardous
CAS Number		
HEXANE-1,6-DI-ISOCYANATE	60- 100	X
POLYMER		
28182-81-2		
HEXAMETHYLENE-DI-	0.1-1.0	X
ISOCYANATE		
822-06-0		

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

SKIN ABSORPTION:

Prolonged or repeated contact may cause an allergic skin reaction. **INHALATION:**

Vapor irritates eyes, nose, and throat. May cause irritation and/or allergic respiratory reaction in lungs.

INGESTION:

May be harmful if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:

Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Do not use if you have chronic (long-term) lung or breathing problems, or if you have ever had a reaction to isocyanates.

CHRONIC OVEREXPOSÚRE EFFECTS

Avoid long-term and repeated contact.

Prolonged inhalation of an ingredient(s) in this product may cause lung sensitivity leading to pneumonitis. This product contains isocyanates. Inhalation may cause a burning sensation of the nose, throat and lungs. Allergic respiratory reactions to these materials are characterized by asthma-like symptoms such as chest tightness, wheezing, shortness of breath and coughing. These symptoms may follow repeated exposure or a single massive exposure and may be delayed.

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: 331 Degrees F (166 Degrees C)

FLASHPOINT TEST METHOD: Pensky-Martens Closed Cup

UEL: Not Available. **LEL:** Not Available.

AUTOIGNITION TEMPERATURE:

Not Available.

EXTINGUISHING MEDIA:

Use extinguishers appropriate for surrounding fire.

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.

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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:

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:

Do not store above 120 degrees F. (48 degrees C.).

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 sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: butyl 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. The decision whether to clean or discard contaminated clothing should be based on the chemicals contaminating them. Some chemicals can cause skin irritation, sensitization or other health effects if the cleaning process does not remove all traces of them. Consult a safety professional to determine whether clothing contaminated with this product can be safely cleaned and reused.

RESPIRATOR:

Where vapors or overspray are present, use a NIOSH approved, positivepressure, air- supplied respirator for the entire time of spraying and until all vapors and mists are gone. Follow the respirator manufacturer's directions for respirator use. 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/	Percent	ACGIH TLV	ACGIH	OSHA PEL	OSHA
CAS Number			STEL		STEL
HEXAMETHYLENE-	0.1-1.0	0.005 ppm	Not	Not	Not
DI-ISOCYANATE			established	established	established
822-06-0					

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
HEXANE-1,6-DI- ISOCYANATE POLYMER 28182-81-2	60- 100	Not established	Not established	0.5 mg/m ³	1 mg/m ³
HEXAMETHYLENE- DI-ISOCYANATE 822-06-0	0.1-1.0	C- 0.02 PPM	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: 1.158 PHYSICAL STATE: Liquid 100.00 **Percent Solids:** Percent Volatile by Volume: .000

Not available. pH: ODOR THRESHOLD: Not available. Vapour Pressure: Not Applicable.

ODOR/APPEARANCE: Viscous liquid with an odor

characteristic of the solvents listed in

Section 2.

HEAVIER THAN AIR **VAPOR DENSITY:**

Evaporation Rate:

BOILING POINT OR RANGE: Not available. Not Applicable. Freezing Point or Range: Melting Point or Range(°C): Not Applicable. Partition coefficient (n-Not Applicable.

octanol/water):

WEIGHT PER GALLON: 9.65 (U.S.) / 11.5 (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 - Hydrogen cyanide - Lower molecular weight polymer fractions - Traces of isocyanate - Oxides of nitrogen

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U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

FEDERAL REGULATIONS

US Regulations

OO regulations				
Material/	Percent			
CAS Number		CERCLA HS -	SARA EHS-	SARA 313
		RQ (LBS)	TPQ (LBS)	
HEXANE-1,6-DI-	60- 100	Not Listed	Not Listed	Not Listed
ISOCYANATE				
POLYMER				
28182-81-2				
HEXAMETHYLENE-	0.1-1.0	100 LBS	Not Listed	Not Listed
DI-ISOCYANATE				
822-06-0				

U.S. TSCA: This product and/or all of its components are listed on the

SARA 311/312

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

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: 3 11 HMIS Rating: 3*11

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

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.

95-859 001001 (00077715.009)(04/09/03)

970310, 001, 0814

*** END OF MSDS ***

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Material/ CAS Number	Percent	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)
HEXAMETHYLENE-	0.1-1.0	.71 g/kg	.57 g/kg	.15 mg/l 4 hr
DI-ISOCYANATE				-
822-06-0				

CHRONIC TOXICITY

Ingredient Target Organ/Chronic Effects:

- Lung - Respiratory sensitizer

Mutagenicity Toxicity:

This has not been tested for this product.

Reproductive Toxicity:

This has not been tested for this product.

SUPPLEMENTAL HEALTH INFORMATION:

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS

Ecotoxicity: No Information Available.

ENVIRONMENTAL FATE

Mobility: No information available. No information available. **Biodegradation:** 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