

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME

AIRTHANE* PHP-75D POLYURETHANE INTERMEDIATE

*AIRTHANE is a registered trademark of Air

Products and Chemicals, Inc.

MSDS REVISION NUMBER

5

MANUFACTURER

Air Products and Chemicals, Inc.

7201 Hamilton Blvd., Allentown, PA 18195-1501 www.airproducts.com/msds

TELEPHONE NUMBER

800-345-3148

EMERGENCY TELEPHONE NUMBER(S)

800-523-9374 (Continental U.S.)

610-481-7711 (Outside Continental U.S.)

REVISION DATE

AUGUST 2000

EMERGENCY OVERVIEW

HMIS/NFPA HEALTH

FLAMMABILITY 1

REACTIVITY 1

PHYSICAL FORM

Viscous liquid

COLOR

Colorless / Amber

ODOR

Odorless

1

HAZARDS

Mild eye irritant. Mild skin irritant.

EXTINGUISHING MEDIA

Ignition will give rise to a Class B fire. In

case of fire use: Water streams.

C.A.S. CHEMICAL NAME

Not available

SYNONYMS

None

CHEMICAL FAMILY

Polyurethane

EMPIRICAL FORMULA

No Data

INTENDED USE

Chemical Intermediate

REVISION NOTES

Updated Reactivity Information. Updated



handling and storage information.

SECTION 2 - INGREDIENTS

Num	%	CAS Number and Chemical Name
1.	<0.03	91-08-7 2,6-TOLUENEDIISOCYANATE
2.	<0.03	584-84-9 2,4-TOLUENEDIISOCYANATE
3.	99.90	Polyurethane

The remaining components are trade secret.

OSHA (ACGIH) EXPOSURE LIMITS

		TWA	mg/m3	STEL ppm	mg/m3	CEILING ppm	mg/m3
		ppm					
1.	OSHA	N/E	N/E	N/E	N/E	N/E	N/E
	ACGIH	N/E	N/E	N/E	N/E	N/E	N/E
2.	OSHA	0.0050	0.0400	0.0200	0.1500	N/E	N/E
	ACGIH	0.0050	0.0050	0.0200	0.1400	N/E	0.0200
 3.	OSHA	N/E	N/E	N/E	N/E	N/E	N/E
	ACGIH	N/E	N/E	N/E	N/E	N/E	N/E

N/E = Not Established.

SECTION 3 - HEALTH HAZARDS

ROUTES OF EXPOSURE

Eye Contact Skin Contact Ingestion

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

HEALTH HAZARDS

Mild eye irritant. Mild skin irritant.

TARGET ORGANS

None known

SIGNS AND SYMPTOMS OF EXPOSURE (Acute effects)

Contact with eyes may cause mild irritation and discomfort. Contact with skin causes mild irritation and discomfort.



Inhalation of mists may cause irritation in the respiratory tract.

SIGNS AND SYMPTOMS OF EXPOSURE (Possible Longer Term Effects)
No known effects

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None known

CARCINOGENS UNDER OSHA, ACGIH, NTP, IARC, OTHER

This product contains no carcinogens in concentrations of 0.1 percent or greater.

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes.

SKIN CONTACT

Wash affected area with soap and water. Remove contaminated clothing and shoes.

INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Prevent aspiration of vomit. Turn victim's head to the side. Seek medical advice.

INGESTION

If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

FLASH POINT (closed cup) >160.00 C (>320.00 F)

UPPER EXPLOSION LIMIT (UEL) No Data
LOWER EXPLOSION LIMIT (LEL) No Data

AUTOIGNITION TEMPERATURE No Data FIRE HAZARD CLASSIFICATION (OSHA/NFPA) Class IIIB

EXTINGUISHING MEDIA

Ignition will give rise to a Class B fire. Do not add water or other liquids to this product. In case of fire use: Water streams.

SPECIAL FIRE FIGHTING PROCEDURES



Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus.

Retain expended liquids from fire fighting for later disposal.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May generate toxic or irritating combustion products.

Sudden reaction and fire may result if product is mixed with an oxidizing agent.

May generate carbon monoxide gas.

Personnel in vicinity and downwind should be evacuated.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)
Stop the leak, if possible. Shut off or remove all ignition
sources. Construct a dike to prevent spreading (includes molten
liquids until they freeze).

CLEAN-UP PROCEDURES

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck. Insulated gloves such as thermal lined rubber when handling hot material.

OTHER EMERGENCY ADVICE

Wear protective clothing, boots, gloves, and eye protection.

SECTION 7 - HANDLING AND STORAGE

STORAGE

Keep away from: oxidizers. Keep in cool, dry, ventilated storage and in closed containers.

HANDLING

Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke.

OTHER PRECAUTIONS

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS



EYE PROTECTION

Chemical safety glasses. Full face shield with goggles underneath when molten material is being handled.

HAND PROTECTION

Insulated gloves such as thermal lined rubber when handling hot material.

RESPIRATORY PROTECTION

Not required under normal conditions in a well-ventilated workplace.

PROTECTIVE CLOTHING

Long sleeved clothing.

ENGINEERING CONTROLS

Maintain air concentrations in work spaces in accord with standards outlined in Sections 2 and 3.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations and safety showers.

SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM COLOR ODOR VAPOR PRESSURE (mm Hg at 21C (70F)) VAPOR DENSITY (Air = 1) BOILING POINT MELTING POINT SOLUBILITY IN WATER SPECIFIC GRAVITY (Water = 1) MOLECULAR WEIGHT

Colorless / Amber Odorless No Data < 0.06767 No Data >250.00 C (>482.00 F) No Data

Viscous liquid

Reacts slightly with water

No Data

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY Stable.

CONDITIONS TO AVOID (if unstable) Not applicable

INCOMPATIBILITY (Materials to Avoid)

Oxidizing Agents (i.e. perchlorates, nitrates etc.). Sodium or Calcium Hypochlorite. Alcohols. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Product reacts slowly with water which results in the



liberation of carbon dioxide. Reaction with water or contaminants or excessive heat may result in sufficient pressure to burst container.

 ${\sf HAZARDOUS}$ DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials).

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Irritating and toxic fumes at elevated temperatures.

HAZARDOUS POLYMERIZATION
Will not occur

CONDITIONS TO AVOID (if polymerization may occur)
Not applicable

SECTION 11 - TOXICOLOGICAL PROPERTIES

ACUTE ORAL TOXICITY (LD50, RAT)
>5000.00 mg/kg (No deaths) (Estimate)

ACUTE DERMAL TOXICITY (LD50, RABBIT) >5000.00 mg/kg (No deaths)

ACUTE INHALATION TOXICITY (LC50, RAT)
No Data

OTHER DATA

Data available on components only.

OTHER ACUTE EFFECTS
No Data

IRRITATION EFFECTS DATA

Mild irritant to the eyes of a rabbit.

CHRONIC/SUBCHRONIC DATA

No delayed, subchronic or chronic test data are known.

SECTION 12 - ECOLOGICAL INFORMATION

No Data

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Comply with all Federal, State and Local Regulations.



SECTION 14 - TRANSPORT INFORMATION

DOT NON-BULK SHIPPING NAME

RESIN COMPOUND - Not DOT Regulated

DOT BULK SHIPPING NAME

Refer to Bill of Lading.

IMO SHIPPING DATA

Refer to Bill of Lading.

ICAO/IATA SHIPPING DATA

RESIN COMPOUND - Not IATA Regulated

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)
None

EPA SARA Title III Section 312 (40CFR370) hazard class None

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are
None

STATE REGULATIONS

PROPOSITION 65 SUBSTANCES (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986")

2,4-TOLUENEDIISOCYANATE

2,6-TOLUENEDIISOCYANATE

NEW JERSEY TRADE SECRET REGISTRY NUMBER(S) 05995500-(PHP75D)

SECTION 16 - INTERNATIONAL REGULATIONS

CANADA

DSL

Included on Inventory.
WHMIS HAZARD CLASSIFICATION
None
WHMIS TRADE SECRET REGISTRY NUMBER(S)

None

WHMIS TRADE SECRET REGISTRY NUMBER(S)

lone

WHMIS HAZARDOUS INGREDIENTS

None

EUROPEAN ECONOMIC COMMUNITY (EEC)

EINECS/ELINCS MASTER INVENTORY

Included on EINECS inventory or polymer substance, mono included on EINECS inventory or no longer polymer.

EEC RISK (R) PHRASES

There are no known health hazards (ROO).

EEC SPECIAL PHRASES

Contains Isocyanates. See information supplied by the manufacturer.

AUSTRALIA

AICS

Not on Inventory.

JAPAN MITI

Not on Inventory.

PHILIPPINES PICCS

Not on Inventory.

KOREA ECL

Not on Inventory.

CHINA SEPA

Not on Inventory.

PRODUCT CODE

PHP75D

END OF DOCUMENT