

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 1 of 7

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

WATTYL POLY U750 PART B

SYNONYMS

"Product Code: 202479", hardener, catalyst, "curing agent"

PROPER SHIPPING NAME

PAINT

PRODUCT USE

The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation. Hardener or Part B of a 2 pack. urethane coating system. Requires that the two parts be mixed by hand or mixer before use, in accordance with manufacturers directions. Mix only as much as is required. Apply by brush, hand roller or spray atomisation.

SUPPLIER

Company: Wattyl Pty Ltd

Address:

4 Steel St

Blacktown

NSW, 2148

AUS

Telephone: +61 2 9621 6255

Emergency Tel: 1800 039 008

Fax: +61 2 9831 4244

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

Risk Codes	Risk Phrases
R10	Flammable.
R20	Harmful by inhalation.
R42	May cause SENSITISATION by inhalation.
R43	May cause SENSITISATION by skin contact.
R61(2)	May cause harm to the unborn child.
R65	HARMFUL- May cause lung damage if swallowed.

SAFETY

Safety Codes	Safety Phrases
S01	Keep locked up.
S23	Do not breathe gas/fumes/vapour/spray.
S38	In case of insufficient ventilation wear suitable respiratory equipment.
S51	Use only in well ventilated areas.
S09	Keep container in a well ventilated place.
S53	Avoid exposure - obtain special instructions before use.
S401	To clean the floor and all objects contaminated by this material use water and detergent.
S07	Keep container tightly closed.
S35	This material and its container must be disposed of in a safe way.
S13	Keep away from food drink and animal feeding stuffs.
S27	Take off immediately all contaminated clothing.
S26	In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.
S60	This material and its container must be disposed of as hazardous waste.

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 2 of 7

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
hexamethylene diisocyanate polymer with residual	28182-81-2	>60
hexamethylene diisocyanate	822-06-0	<0.15
propylene glycol monomethyl ether acetate, alpha- isomer	108-65-6	1-5
contains less than 0.1% benzene		

Section 4 - FIRST AID MEASURES

SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
 - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

- If skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
 - Flush skin and hair with running water (and soap if available).

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically.
for simple esters:

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- For sub-chronic and chronic exposures to isocyanates:
 - This material may be a potent pulmonary sensitiser which causes bronchospasm even in patients without prior airway hyperreactivity.
 - Clinical symptoms of exposure involve mucosal irritation of respiratory and gastrointestinal tracts.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Alcohol stable foam.
- Dry chemical powder.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
 - May be violently or explosively reactive.
- When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 metres in all directions.

FIRE/EXPLOSION HAZARD

- Liquid and vapour are flammable.
 - Moderate fire hazard when exposed to heat or flame.
- Combustion products include: carbon dioxide (CO₂), carbon monoxide (CO), isocyanates, and minor amounts of, hydrogen cyanide, nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material.
- Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.
- Flooding quantities of water only.
 - Small quantities of water in contact with hot liquid may react violently with generation of a large volume of rapidly expanding hot sticky semi-solid foam.
 - Presents additional hazard when fire fighting in a confined space.

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 3 of 7

Section 5 - FIRE FIGHTING MEASURES

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.

HAZCHEM: 3[Y]

Personal Protective Equipment

Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.

MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

SUITABLE CONTAINER

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C).

STORAGE INCOMPATIBILITY

- Avoid reaction with water, alcohols and detergent solutions.
- Isocyanates and thioisocyanates are incompatible with many classes of compounds, reacting exothermically to release toxic gases. Reactions with amines, strong bases, aldehydes, alcohols, alkali metals, ketones, mercaptans, strong oxidisers, hydrides, phenols, and peroxides can cause vigorous releases of heat. Acids and bases initiate polymerisation reactions in these materials. Avoid cross contamination between the two liquid parts of product (kit). If two part products are mixed or allowed to mix in proportions other than manufacturer's recommendation, polymerisation with gelation and evolution of heat (exotherm) may occur.
- Esters react with acids to liberate heat along with alcohols and acids.
- Strong oxidising acids may cause a vigorous reaction with esters that is sufficiently exothermic to ignite the reaction products.
- Avoid contamination with water, alkalies and detergent solutions.
- Material reacts with water and generates gas, pressurises containers with even drum rupture resulting.
- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
Australia Exposure Standards	hexamethylene diisocyanate polymer (Isocyanates, all (as-NCO))		0.02		0.07
Australia Exposure Standards	hexamethylene diisocyanate (Isocyanates, all (as-NCO))		0.02		0.07
Australia Exposure Standards	propylene glycol monomethyl ether acetate, alpha- isomer (1- Methoxy- 2- propanol acetate)	50	274	100	548

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 4 of 7

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³
--------	----------	---------	-----------------------	----------	------------------------

PERSONAL PROTECTION

RESPIRATOR

Type A-P Filter of sufficient capacity

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

Wear chemical protective gloves, eg. PVC.

NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

Suitability and durability of glove type is dependent on usage. Factors such as:

- frequency and duration of contact,
 - chemical resistance of glove material,.
- Neoprene gloves.

OTHER

- Overalls.
- PVC Apron.

ENGINEERING CONTROLS

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required.

Ventilation equipment should be explosion-resistant.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Clear colourless to pale yellow flammable liquid with a strong sharp solvent odour; does not mix with water.

Will react with water to produce carbon dioxide.

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Sinks in water.

Molecular Weight: Not Available
Melting Range (°C): Not Available
Solubility in water (g/L): Immiscible
pH (1% solution): Not Applicable
Volatile Component (%vol): 15- 25
Relative Vapour Density (air=1): >1
Lower Explosive Limit (%): Not Available
Autoignition Temp (°C): Not Available
State: Liquid

Boiling Range (°C): 127 (IBP)
Specific Gravity (water=1): 1.10- 1.15
pH (as supplied): Not Applicable
Vapour Pressure (kPa): Not Available
Evaporation Rate: Not Available
Flash Point (°C): 47
Upper Explosive Limit (%): Not Available
Decomposition Temp (°C): Not Available
Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

Harmful by inhalation.

HARMFUL- May cause lung damage if swallowed.

Vapours may cause dizziness or suffocation.

CHRONIC HEALTH EFFECTS

May cause SENSITISATION by inhalation.

May cause SENSITISATION by skin contact.

May cause harm to the unborn child.

TOXICITY AND IRRITATION

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 5 of 7

Section 11 - TOXICOLOGICAL INFORMATION

of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. In addition to the allergen-specific potential for causing respiratory sensitisation, the amount of the allergen, the exposure period and the genetically determined disposition of the exposed person are likely to be decisive. Particular attention is drawn to so-called atopic diathesis which is characterised by an increased susceptibility to allergic rhinitis, allergic bronchial asthma and atopic eczema (neurodermatitis) which is associated with increased IgE synthesis. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce severe skin irritation after prolonged or repeated exposure, and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) thickening of the epidermis.

HEXAMETHYLENE DIISOCYANATE POLYMER:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Inhalation (rat) LC50: 18500 mg/m³/1h

Oral (rat) LD50: >10000 mg/kg*

Dermal (rabbit) LD50: >5000 mg/kg*

IRRITATION

Skin (rabbit): 500 mg - Moderate

Eye (rabbit) 100: mg - [* BAYER]

Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis.

Allergic reactions which develop in the respiratory passages as bronchial asthma or rhinoconjunctivitis, are mostly the result of reactions of the allergen with specific antibodies of the IgE class and belong in their reaction rates to the manifestation of the immediate type. In addition to the allergen-specific potential for causing respiratory sensitisation, the amount of the allergen, the exposure period and the genetically determined disposition of the exposed person are likely to be decisive. Particular attention is drawn to so-called atopic diathesis which is characterised by an increased susceptibility to allergic rhinitis, allergic bronchial asthma and atopic eczema (neurodermatitis) which is associated with increased IgE synthesis. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.

HEXAMETHYLENE DIISOCYANATE:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 738 mg/kg

Inhalation (rat) LC50: 60 mg/m³/4h

Oral (mouse) LD50: 350 mg/kg

Inhalation (mouse) LC50: 30 mg/m³

Intravenous (mouse) LD50: 5.6 mg/kg

Dermal (rabbit) LD50: 593 mg/kg

IRRITATION

Nil Reported

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 8532 mg/kg

Dermal (rabbit) LD50: >5000 mg/kg* *

[CCINFO]

Inhalation (rat) LC50: 4345 ppm/6h

A BASF report (in ECETOC) showed that inhalation exposure to 545 ppm PGMEA (beta isomer) was associated with a teratogenic response in rabbits; but exposure to 145 ppm and 36 ppm had no adverse effects.

The beta isomer of PGMEA comprises only 10% of the commercial material, the remaining 90% is alpha isomer. Hazard appears low [I.C.]

MATERIAL

CARCINOGEN

REPROTOXIN

SENSITISER

SKIN

hexamethylene diisocyanate polymer

AUOEL

hexamethylene diisocyanate

ILOP

AUOEL

SENSITISER

AUOEL: Australia Exposure Standards - Sensitisers: hexamethylene diisocyanate polymer

REPROTOXIN

ILOP: France Threshold Limit Values for Occupational Exposure (VLE, VME) - Allergens: hexamethylene diisocyanate

SENSITISER

AUOEL: Australia Exposure Standards - Sensitisers: hexamethylene diisocyanate

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 6 of 7

Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

Section 13 - DISPOSAL CONSIDERATIONS

Section 14 - TRANSPORTATION INFORMATION

Labels Required: FLAMMABLE LIQUID
HAZCHEM: 3[Y]

UNDG:

Dangerous Goods Class:	3	Subrisk:	None
UN Number:	1263	Packing Group:	III
Shipping Name:	PAINT		

Air Transport IATA:

ICAO/IATA Class:	3	ICAO/IATA Subrisk:	None
UN/ID Number:	1263	Packing Group:	III
Special provisions:	A3 A72		
Shipping name:	PAINT		

Maritime Transport IMDG:

IMDG Class:	3	IMDG Subrisk:	None
UN Number:	1263	Packing Group:	III
EMS Number:	F- E, S- E	Special provisions:	163 223 944 955
Limited Quantities:	5 L		
Shipping Name:	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)		

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: None

REGULATIONS

Wattyl Poly U750 Part B (CAS: None):

No regulations applicable

hexamethylene diisocyanate polymer (CAS: 28182-81-2) is found on the following regulatory lists;

- Australia - New South Wales Hazardous Substances Requiring Health Surveillance
- Australia - Tasmania Hazardous Substances Requiring Health Surveillance
- Australia - Western Australia Hazardous Substances Requiring Health Surveillance
- Australia Exposure Standards
- Australia Hazardous Substances
- Australia Hazardous Substances Requiring Health Surveillance
- Australia Inventory of Chemical Substances (AICS)
- Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6

hexamethylene diisocyanate polymer (CAS: 53200-31-0) is found on the following regulatory lists;

- Australia - New South Wales Hazardous Substances Requiring Health Surveillance
- Australia - Tasmania Hazardous Substances Requiring Health Surveillance
- Australia - Western Australia Hazardous Substances Requiring Health Surveillance
- Australia Exposure Standards
- Australia Hazardous Substances
- Australia Hazardous Substances Requiring Health Surveillance
- Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6

hexamethylene diisocyanate (CAS: 822-06-0) is found on the following regulatory lists;

- Australia - New South Wales Hazardous Substances Requiring Health Surveillance
- Australia - Tasmania Hazardous Substances Requiring Health Surveillance
- Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2
- Australia - Western Australia Hazardous Substances Requiring Health Surveillance
- Australia Exposure Standards
- Australia Hazardous Substances

continued...

WATTYL POLY U750 PART B

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 5127-93

Version No:4

CD 2008/1 Page 7 of 7

Section 15 - REGULATORY INFORMATION

Australia Hazardous Substances Requiring Health Surveillance
Australia Inventory of Chemical Substances (AICS)
Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations 1994 - Hazardous Substances Requiring Health Surveillance
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix E (Part 2)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Appendix F (Part 3)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6
IMO IBC Code Chapter 17: Summary of minimum requirements
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

propylene glycol monomethyl ether acetate, alpha-isomer (CAS: 108-65-6) is found on the following regulatory lists;

Australia Exposure Standards
Australia Hazardous Substances
Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
IMO IBC Code Chapter 17: Summary of minimum requirements
International Air Transport Association (IATA) Dangerous Goods Regulations
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

propylene glycol monomethyl ether acetate, alpha-isomer (CAS: 84540-57-8) is found on the following regulatory lists;
International Air Transport Association (IATA) Dangerous Goods Regulations

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
hexamethylene diisocyanate polymer	28182- 81- 2, 53200- 31- 0
propylene glycol monomethyl ether acetate, alpha- isomer	108- 65- 6, 84540- 57- 8

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: 4-Apr-2008
Print Date: 10-Apr-2008