

WATTYL POLY U400 MCR PART A

Chemwatch Material Safety Data Sheet

Issue Date: 4-Apr-2008

XC9317EC

CHEMWATCH 460365

Version No:6

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

WATTYL POLY U400 MCR PART A

SYNONYMS

"Product Code: 202201, 202204, 202207", "202210, 202216, 202222, 202225", 202228

PROPER SHIPPING NAME

PAINT

PRODUCT USE

Part A or Base 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. The material when ready for use, i.e. with 2 parts mixed together, CONTAINS free organic isocyanate. Operators should be trained in procedures for safe use of this material. Solvent- based recoatable polyurethane coating.

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

S5

RISK

Risk Codes	Risk Phrases
R10	Flammable.
R20/21	Harmful by inhalation and in contact with skin.
R36/37/38	Irritating to eyes respiratory system and skin.
R52/53	Harmful to aquatic organisms may cause long- term adverse effects in the aquatic environment.
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.

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
xylene	1330-20-7	10-20
naphtha solvent alkyl ester	92062-15-2	10-20
titanium dioxide	13463-67-7	<5
hydrocarbon solvent		0-20
propylene glycol monomethyl ether acetate, alpha- isomer	108-65-6	<5
methyl 1, 2, 2, 6, 6- pentamethyl- 4- piperidyl sebacate	82919-37-7	<0.1
other ingredients not contributing to the classification		balance

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.
- Avoid giving milk or oils.
- Avoid giving alcohol.
- 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 acute or short term repeated exposures to xylene:
- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
 - Pulmonary absorption is rapid with about 60-65% retained at rest.

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 monoxide (CO), carbon dioxide (CO₂), other pyrolysis products typical of burning organic material.

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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]

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 mixing with alkali metals such as sodium, potassium and lithium.
- **WARNING:** Avoid or control reaction with peroxides. All transition metal peroxides should be considered as potentially explosive. For example transition metal complexes of alkyl hydroperoxides may decompose explosively.
- The pi-complexes formed between chromium(0), vanadium(0) and other transition metals (haloarene-metal complexes) and mono-or poly-fluorobenzene show extreme sensitivity to heat and are explosive.
- 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 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	xylene (Xylene (o-, m-, p- isomers))	80	350	150	655
Australia Exposure Standards	titanium dioxide (Titanium dioxide (a))		10		
Australia Exposure Standards	propylene glycol monomethyl ether acetate, alpha- isomer (1- Methoxy- 2- propanol acetate)	50	274	100	548

The following materials had no OELs on our records

- naphtha solvent: CAS:92062- 15- 2
- methyl 1, 2, 2, 6, 6- pentamethyl- 4- piperidyl sebacate: CAS:82919- 37- 7

PERSONAL PROTECTION

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Section 8 - EXPOSURE CONTROLS / 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.

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

- frequency and duration of contact,
- chemical resistance of glove material,

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

Coloured flammable liquid with a strong solvent odour; does not mix with water.

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Sinks in water.

Molecular Weight: Not Applicable
Melting Range (°C): Not Available
Solubility in water (g/L): Immiscible
pH (1% solution): Not Applicable
Volatile Component (%vol): 10- 30
Relative Vapour Density (air=1): >1
Lower Explosive Limit (%): 1.0
Autoignition Temp (°C): 426
State: Liquid

Boiling Range (°C): 128- 175
Specific Gravity (water=1): 1.0- 1.3
pH (as supplied): Not Applicable
Vapour Pressure (kPa): Not Available
Evaporation Rate: Not Available
Flash Point (°C): 28 (OC- lit)
Upper Explosive Limit (%): 7.0
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- May cause lung damage if swallowed.

Harmful by inhalation and in contact with skin.

Irritating to eyes, respiratory system and skin.

Vapours may cause dizziness or suffocation.

CHRONIC HEALTH EFFECTS

May cause harm to the unborn child.

TOXICITY AND IRRITATION

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

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

XYLENE:

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

TOXICITY

Oral (human) LDLo: 50 mg/kg

Oral (rat) LD50: 4300 mg/kg

Inhalation (human) TClO: 200 ppm

IRRITATION

Skin (rabbit):500 mg/24h Moderate

Eye (human): 200 ppm Irritant

Eye (rabbit): 87 mg Mild

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Section 11 - TOXICOLOGICAL INFORMATION

Inhalation (man) LCLo: 10000 ppm/6h
Inhalation (rat) LC50: 5000 ppm/4h
Oral (Human) LD: 50 mg/kg
Inhalation (Human) TCLo: 200 ppm/4h
Intraperitoneal (Rat) LD50: 2459 mg/kg
Subcutaneous (Rat) LD50: 1700 mg/kg
Oral (Mouse) LD50: 2119 mg/kg
Intraperitoneal (Mouse) LD50: 1548 mg/kg
Intravenous (Rabbit) LD: 129 mg/kg
Inhalation (Guinea) pig: LC 450 ppm/4h

Eye (rabbit): 5 mg/24h SEVERE

The material may produce severe irritation to the eye causing pronounced 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.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

Reproductive effector in rats

NAPHTHA SOLVENT:

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

No significant acute toxicological data identified in literature search.

TITANIUM DIOXIDE:

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

TOXICITY

IRRITATION

Skin (human) 0.3: mg/3d- I Mild

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 epidermis.

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER:

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

TOXICITY

IRRITATION

Nil Reported

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 but emphasizes the need for care in handling this chemical. [I.C.I]

METHYL 1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL SEBACATE:

No significant acute toxicological data identified in literature search.

MATERIAL	CARCINOGEN	REPROTOXIN	SENSITISER	SKIN
xylene	IARC:3	ILOEI		
titanium dioxide	IARC:2B			
methyl 1, 2, 2, 6, 6- pentamethyl- 4- piperidyl sebacate	IARC:3			

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: xylene Category: The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.

REPROTOXIN

ILOEI: ILO Chemicals in the electronics industry that have toxic effects on reproduction: xylene

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: titanium dioxide Category: WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

CARCINOGEN

IARC: International Agency for Research on Cancer (IARC) Carcinogens: methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Category: The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.

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Section 12 - ECOLOGICAL INFORMATION

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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: S5

REGULATIONS

Wattyl Poly U400 MCR Part A (CAS: None):
No regulations applicable

xylene (CAS: 1330-20-7) is found on the following regulatory lists;

- Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)
- Australia - Australian Capital Territory Environment Protection Regulation Pollutants entering waterways - Domestic water quality
- Australia Exposure Standards
- Australia Hazardous Substances
- Australia High Volume Industrial Chemical List (HVICL)
- Australia Inventory of Chemical Substances (AICS)
- Australia National Pollutant Inventory
- 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) - Appendix I
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5
- Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6
- IMO IBC Code Chapter 17: Summary of minimum requirements
- IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
- IMO Provisional Categorization of Liquid Substances
- International Agency for Research on Cancer (IARC) Carcinogens
- 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
- WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water

naphtha solvent (CAS: 92062-15-2) is found on the following regulatory lists;

- Australia Hazardous Substances
- 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

titanium dioxide (CAS: 13463-67-7) is found on the following regulatory lists;

- Australia Exposure Standards

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Section 15 - REGULATORY INFORMATION

Australia High Volume Industrial Chemical List (HVICL)
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5
Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines
Australia Therapeutic Goods Administration (TGA) Sunscreening agents permitted as active ingredients in listed products
CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP
IMO IBC Code Chapter 17: Summary of minimum requirements
International Agency for Research on Cancer (IARC) Carcinogens
OECD Representative List of High Production Volume (HPV) Chemicals
titanium dioxide (CAS: 1317-70-0) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
OECD Representative List of High Production Volume (HPV) Chemicals
titanium dioxide (CAS: 1317-80-2) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 4
Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 5
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
methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (CAS: 82919-37-7) is found on the following regulatory lists;
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) Carcinogens
No data available for titanium dioxide as CAS: 12188-41-9.

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
titanium dioxide	13463- 67- 7, 1317- 70- 0, 1317- 80- 2, 12188- 41- 9
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.

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