

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 1 of 8

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

WATTYL EPINAMEL UC230 PART A

SYNONYMS

"Product Code: 201311", "epinamel epoxy coating"

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. Part A or Base of a 2 pack. epoxy 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. May be applied by roller.

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.
R38	Irritating to skin.
R40(3)	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R43	May cause SENSITISATION by skin contact.
R52	Harmful to aquatic organisms.
R65	HARMFUL- May cause lung damage if swallowed.

SAFETY

Safety Codes	Safety Phrases
S36	Wear suitable protective clothing.
S401	To clean the floor and all objects contaminated by this material use water and detergent.
S13	Keep away from food drink and animal feeding stuffs.
S46	If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
S60	This material and its container must be disposed of as hazardous waste.

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 2 of 8

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
bisphenol A/ bisphenol A diglycidyl ether polymer	25036-25-3	10-30
xylene	1330-20-7	10-30
n- butanol	71-36-3	<5
isobutanol	78-83-1	<5
titanium dioxide	13463-67-7	<15
ingredients not contributing to the classification		balance
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.
- 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:
- Immediately hold eyelids apart and flush the eye continuously with 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.

Treat symptomatically.

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

- 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), aldehydes, other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 3 of 8

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

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT allow clothing wet with material to stay in contact with skin.
- Electrostatic discharge may be generated during pumping - this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of overexposure occurs.

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 amines, mercaptans, strong acids and oxidising agents.
- 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	Peak ppm	Peak mg/m ³
Australia Exposure Standards	bisphenol A/ bisphenol A diglycidyl ether polymer (Inspirable dust (not otherwise classified))		10				
Australia Exposure Standards	xylene (o-, m-, p- isomers)	80	350	150	655		
Australia Exposure	n- butanol (n- Butyl					50	152

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 4 of 8

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³
Standards	alcohol)						
Australia Exposure Standards	isobutanol (Isobutyl alcohol)	50	152				
Australia Exposure Standards	titanium dioxide (Titanium dioxide (a))		10				

PERSONAL PROTECTION

RESPIRATOR

Type A Filter of sufficient capacity

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

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,.
- When handling liquid-grade epoxy resins wear chemically protective gloves (e.g nitrile or nitrile-butatoluene rubber), boots and aprons.
- DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin).

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

White flammable liquid; does not mix with water. Strong solvent odour.

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Sinks in water.

Molecular Weight: Not Applicable
Melting Range (°C): Not Applicable
Solubility in water (g/L): Insoluble
pH (1% solution): Not Applicable
Volatile Component (%vol): Not Available
Relative Vapour Density (air=1): Not Available
Lower Explosive Limit (%): 1.0
Autoignition Temp (°C): 345
State: Liquid

Boiling Range (°C): 118- 145
Specific Gravity (water=1): 1.4
pH (as supplied): Not Applicable
Vapour Pressure (kPa): Not Available
Evaporation Rate: Not Available
Flash Point (°C): 29 (OC)

Upper Explosive Limit (%): 11.2
Decomposition Temp (°C): Not Available
Viscosity: Not Available

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 5 of 8

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

Irritating to skin.

HARMFUL- May cause lung damage if swallowed.

Risk of serious damage to eyes.

Harmful by inhalation and in contact with skin.

Vapours may cause dizziness or suffocation.

CHRONIC HEALTH EFFECTS

May cause SENSITISATION by skin contact.

Limited evidence of a carcinogenic effect.

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 of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

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.

BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER:

No significant acute toxicological data identified in literature search.

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

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

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

N-BUTANOL:

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

TOXICITY

Oral (rat) LD50: 790 mg/kg

Inhalation (human) TClO: 25 ppm

Inhalation (rat) LC50: 8000 ppm/4h

Dermal (rabbit) LD50: 3400 mg/kg

Inhalation (human) TClO: 86000 mg/m³

IRRITATION

Skin (rabbit):500 mg/24h Moderate

Eye (human): 200 ppm Irritant

Eye (rabbit): 87 mg Mild

Eye (rabbit): 5 mg/24h SEVERE

IRRITATION

Skin (rabbit): 405 mg/24h- Moderate

Eye (human): 50 ppm - Irritant

Eye (rabbit): 1.6 mg- SEVERE

Eye (rabbit): 24 mg/24h- SEVERE

ISOBUTANOL:

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

TOXICITY

Oral (rat) LD50: 2460 mg/kg.

Dermal (rabbit) LD50: 3400 mg/kg.

IRRITATION

Skin (rabbit): mg (open)- SEVERE

Eye (rabbit): 2 20 mg/24h- Moderate

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 6 of 8

Section 11 - TOXICOLOGICAL INFORMATION

Eye (rabbit): 2 mg/24h - SEVERE

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.

MATERIAL	CARCINOGEN	REPROTOXIN	SENSITISER	SKIN
xylene	IARC:3	ILOEI		
titanium dioxide	IARC:2B			

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.

Section 12 - ECOLOGICAL INFORMATION

Harmful to aquatic organisms.

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

Section 13 - DISPOSAL CONSIDERATIONS

• Containers may still present a chemical hazard/ danger when empty.

• Return to supplier for reuse/ recycling if possible.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

• Recycle wherever possible.

• Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

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 (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or			

Air Transport IATA:

ICAO/IATA Class:	3	ICAO/IATA Subrisk:	None
UN/ID Number:	1263	Packing Group:	III
Special provisions:	A3 A72		
Cargo Only Packing Instructions:	310	Maximum Qty/Pack:	220 L
Passenger and Cargo Packing Instructions:	309	Passenger and Cargo Maximum Qty/Pack:	60 L
Passenger and Cargo Limited Quantity		Passenger and Cargo Limited Quantity	

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 7 of 8

Section 14 - TRANSPORTATION INFORMATION

Packing	Y309	Maximum Qty/Pack:	10 L
Instructions:			
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 Epinamel UC230 Part A (CAS: None):

No regulations applicable

bisphenol A/ bisphenol A diglycidylether polymer (CAS: 25036-25-3) is found on the following regulatory lists;

Australia Inventory of Chemical Substances (AICS)
OECD Representative List of High Production Volume (HPV) Chemicals

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) - 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 IBC Code Provisional Categorization of Liquid Substances
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
International Agency for Research on Cancer (IARC) Carcinogens
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

n-butanol (CAS: 71-36-3) 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 18: List of products to which the Code does not apply
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

isobutanol (CAS: 78-83-1) is found on the following regulatory lists;

Australia Exposure Standards
Australia Hazardous Substances
Australia Inventory of Chemical Substances (AICS)
IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances
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
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 5
Australia Therapeutic Goods Administration (TGA) Substances that may be used as active ingredients in Listed medicines
Australia Therapeutic Goods Administration (TGA) Subscreening 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

continued...

WATTYL EPINAMEL UC230 PART A

Chemwatch Material Safety Data Sheet

Issue Date: 2-May-2008

XC9317EC

CHEMWATCH 15-1759

Version No:1

CD 2007/4 Page 8 of 8

Section 15 - REGULATORY INFORMATION

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 5
OECD Representative List of High Production Volume (HPV) Chemicals

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

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: 2-May-2008

Print Date: 2-May-2008