Safety Data Sheet



1. Identification of the substance/mixture and supplier

Product Name: Duracoat UV Tec

Other Names:

Recommended use: UV absorbent glass coating

Supplier: Uroxsys Ltd

Street Address: 2 Stonedon Drive, East Tamaki, Auckland

Telephone Number: +64 9 2740808 (8.00am to 5.00pm, Monday to Friday)

Facsimile: +64 9 2740500

Emergency Telephone: After hours phone 0800 867666 (or 09 3034580), quote reference:

Uroxsys Helpline

National Poison Information Centre 0800 POISON (764766)

Date of issue 19th July 2013

2. Hazards identification

DANGER







3.1B, 6.1D(Oral), 6.1D(Inhalation), 6.3A, 6.4A, 6.5A, 6.5B, 6.8B, 6.9B, 9.1C

EPA Approval:HSR002662

Surface Coatings and Colourants (Flammable) Group Standard 2006

Hazard Statements:

- Highly flammable liquid and vapour.
- Harmful if swallowed.
- Harmful if inhaled.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- Suspected of damaging fertility or the unborn child
- May cause damage to organs through prolonged orrepeated exposure
- Harmful to aquatic life with long lasting effects.

Product Name: UV Tec Version: 1.2 Page 1 of 7

Prevention Statements

- Read label before use.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/eye protection/face protection.
- Keep out of reach of children.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid breathing fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- In case of inadequate ventilation wear respiratory protection.(see section 8)
- Contaminated work clothing should not be allowed out of the workplace.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.(see section 8)
- Avoid release to the environment.

Response Statements

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- In case of fire: Use foam, Carbon Dioxide or dry powder for extinction.
- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell.
- Take off contaminated clothing and wash before re-use.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.
- IF exposed or concerned: Get medical advice/ attention.

3. Composition/information on ingredients

Material	CAS No:	Content %
Toluene	108-88-3	30 - 50
Xylene	1330-20-7	20 - 40
Aliphatic polyisocyanate prepolymer		10 - 20
Hexamethylene diisocyanate homopolymer	28182-81-2	< 10
Propylene glycol monomethyl ether acetate	108-65-6	< 10
Isophorone diisocyanate	4098-71-9	< 2
Hexamethylene-1,6-diisocyanate	822-06-0	< 0.1

Product Name: UV Tec Version: 1.2 Page 2 of 7

4. First-aid measures

If poisoning occurs, contact a doctor or Poisons Information Centre Phone 0800 764 766.

Ingestion: Do NOT induce vomiting. Give nothing by mouth. Seek immediate medical assistance.

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated

clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply

artificial respiration if patient is not breathing. Get to a hospital or doctor quickly.

Skin Contact: If skin contact occurs, immediately remove contaminated clothing and wash skin thoroughly with

water using soap if available. If irritation persists seek medical assistance.

Eye Contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Notes to physician:

Dermatitis may result from prolonged or repeated exposure. Aspiration into lungs may cause chemical pneumonitis. Causes central nervous system depression. Severe exposure may cause blurred

vision, tremors, shallow and rapid breathing, delirium and unconsciousness.

5. Fire-fighting measures

Hazards from combustion: On burning may emit toxic fumes including those of carbon oxides, nitrogen oxides,

isocyanate vapours and hydrogen cyanide.

Fire-fighting advice: Fire fighters to wear self-contained breathing apparatus and suitable protective

clothing if risk of exposure to vapour or products of combustion. Flammable liquid. May form flammable vapour mixtures with air. Avoid all ignition sources. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep

containers cool with water spray.

6. Accidental release measures

Emergency procedures:

If contamination of sewers or waterways has occurred advise local emergency services.

Methods for containment & clean up:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect in properly labeled containers and seal once product has hardened.

Product Name: UV Tec Version: 1.2 Page 3 of 7

7. Handling and storage

Handling advice:

Avoid skin and eye contact and breathing in vapour. May form flammable vapour mixtures with air. All potential sources of ignition must be eliminated both in and near the work area. Do NOT smoke. Flameproof equipment is necessary in all areas where this chemical is being used. Nearby equipment must be earthed.

Vapour may travel a considerable distance to a source of ignition and flash back.

Storage advice:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. Exposure controls/personal protection

Occupational Exposure Limits:

No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH). However, Workplace Exposure Standard(s) for constituent(s):

Toluene_(skin) TLV/TWA 50ppm, 188 mg/m³

Xylene: TLV/TWA 50ppm, 217 mg/m³

Isocyanates, all (as-NCO): WES-TWA 0.02 mg/m3; WES-STEL 0.07 mg/m3, sen, NZ As published by the New Zealand Occupational Safety and Health Service (OSH).

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limits) - The 15 minute average exposure standard. Applies to any 15 minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both short-term and eight hour, time-weighted average exposures should be determined.

'Sen' Notice – sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Control Measures:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected.

Personal Protective Equipment:

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Product Name: UV Tec Version: 1.2 Page 4 of 7

9. Physical and chemical properties

Physical state: liquid

Solubility: Slightly soluble in water.

Specific Gravity: 0.94
Flash Point (°C): 4°C
Flammability Limits (%): 1.2-8.0
Boiling Point/Range (°C): 110

Colour Pale amber

10. Stability and reactivity

Stability: Stable under normal conditions.

Conditions to avoid: Avoid contact with foodstuffs. Avoid exposure to heat, sources of ignition

and open flame. Reacts with moisture

Incompatible materials: Incompatible with oxidising agents

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing can result in nausea, vomiting and central nervous system depression. Aspiration into

lungs m ay cause chemical pneumonitis which can be fatal.

Eye contact: An eye irritant.

Skin contact: Irritant. Harmful in contact with skin.

Inhalation: Harmful by inhalation. Narcotic at high vapour concentrations. May irritate the respiratory tract.

May cause headache, dizziness, nausea and narcosis.

Long Term Effects:

Repeated exposure may affect the liver, kidney and central nervous system. May cause slight foetotoxicity at doses which are maternally toxic. Prolonged or repeated contact may cause defatting of the skin which can lead to dermatitis. Over exposure, especially during spraying operations without the necessary precautions, entails the risk of concentration dependent irritating effects on eyes, nose, throat and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations. In case of longer contact with skin, tanning and irritating effects are possible.

Toxicological Data:

No LD50 data available for the product. The toxicity of the product may be attributed to the solvents it contains. Additive effects may occur with mixtures of solvents. Similar effects can occur where the consumption of alcohol is also involved. However, for constituents xylene and toluene:

However, for constituents

xylene: Oral LD50 (mouse): 1590 mg/kg, Inhalation LC50 (rat): > 27.6mg/l touene: Oral LD50 (rat): 636 mg/kg, Inhalation LC50 (rat) 12.5-28.8 mg/l

Product Name: UV Tec Version: 1.2 Page 5 of 7

12. Eco toxicological information

Avoid contaminating waterways. Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

13. Disposal considerations

Refer to Waste Management Authority. Advise flammable nature. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent.

Empty container:

Do not contaminate storm water with product or product washing. Do not pour product down the drain. Unwanted product should be brushed out on newspaper, allowed to dry and then disposed of via domestic waste collection. Empty containers should be left open in a well-ventilated area to dry out. When dry, recycle the container via recycling programmes. Disposal of empty paint containers via domestic recycling programmes may differ between local authorities. Check with your local council first.

14. Transport information



Road and Rail Transport

Classified as Dangerous Goods by NZS 5433:1999 Transport of Dangerous Goods on Land.

UN No: 1263

Class-primary 3 Flammable Liquid

Packing Group: II

Proper Shipping Name: PAINT

Hazchem Code: 3[Y]E

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG

Code) for transport by sea.

UN No: 1263

Class-primary: 3 Flammable Liquid

Packing Group: II

Proper Shipping Name: PAINT

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA)

Dangerous Goods Regulations for transport by air.

UN No: 1263

Class-primary: 3 Flammable Liquid

Packing Group: II

Proper Shipping Name: PAINT

Product Name: UV Tec Page 6 of 7 Version: 1.2

15. Regulatory information

ERMA Approval: HSR002662

Group Standard: Surface Coatings and Colourants (Flammable) Group Standard

16. Other information

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Uroxsys Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact Uroxsys Limited at the contact details on page 1.

While Uroxsys Ltd believes that the information contained herein is based on data considered accurate, no warranty or representation is expressed or implied for which Uroxsys Ltd assumes legal responsibility.

This version replaces all previous versions.

END OF SDS

Product Name: UV Tec Version: 1.2 Page 7 of 7