

Safety Data Sheet



1. Identification of the substance/mixture and supplier

Product Name: Duracoat ZK Hardener
Other Names:
Recommended use: Two pack polyurethane 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 29th July 2013

2. Hazards identification

DANGER



3.1B, 6.1D(Oral), 6.1E(Inhalation), 6.3B, 6.4A, 6.5A, 6.5B, 6.8B, 6.9B, 9.1D, 9.3C

EPA Approval: HSR002662

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

Hazard Statements:

- Highly flammable liquid and vapour
- Harmful if swallowed.
- May be harmful if inhaled.
- Causes mild 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 or repeated exposure
- Toxic to aquatic life.
- Harmful to terrestrial vertebrates.

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.
- In case of inadequate ventilation wear respiratory protection.
- 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)
- Do not breathe fume/gas/mist/vapours/spray.
- 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 dry powder, foam, carbon dioxide 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: Call a POISON CENTER or doctor/physician if you feel unwell.
- 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 INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
- Wash contaminated clothing before reuse.
- Get medical advice/attention if you feel unwell.

3. Composition/information on ingredients

Material	CAS No	Content %
Isocyanate polymer	28182-81-2	30 – 60
Toluene	108-88-3	30 – 50
Methyl ethyl ketone	78-93-3	20 – 30
Hexamethylene-1,6- diisocyanate	822-06-0	< 0.07

4. First-aid measures

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

Ingestion:	If swallowed, do NOT induce vomiting. Immediately rinse mouth with water and give water to drink. 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 or hair contact occurs, immediately remove contaminated clothing and clean skin and hair with plenty of soap and water. If irritation occurs seek medical advice.
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Notes to physician:	Treat symptomatically.

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.
Suitable Extinguishing Media:	Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder)
Hazchem Code	3[Y]E

6. Accidental release measures

Emergency procedures:	If contamination of sewers or waterways has occurred advise local emergency services.
Methods for containment & clean up:	Quickly wipe up material with cloth or absorbent paper avoiding skin contact.
For large spills:	Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Collect and seal in properly labeled containers for disposal. Wash area down with excess water.

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
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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 place and out of direct sunlight. Store away from acids, alcohols, oxidizing agents, moisture and sources of heat or ignition. Keep dry, reacts with water; may lead to drum rupture. Keep containers closed at all times, 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):

Isocyanates, all (as-NCO): WES-TWA 0.02 mg/m³; WES-STEL 0.07 mg/m³, sen, NZ

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

Methyl ethyl ketone TLV/TWA 150 ppm (445 mg/m³), STEL 300 ppm (890 mg/m³) (bio)

As published by the New Zealand Occupational Safety and Health Service(OSH).

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.

9. Physical and chemical properties

Physical state:	Liquid
Solubility:	negligible
Specific Gravity:	0.93
Flash Point (°C):	-7°C
Flammability Limits (%):	1.8-11.5
Boiling Point/Range (°C):	110
Colour	Pale yellow

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 oxidizing 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. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs.
Eye contact:	An eye irritant.
Skin contact:	Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis.
Inhalation:	Material may be irritant to the mucous membranes of the respiratory tract (airways). May cause respiratory sensitization in sensitive individuals, producing asthma-like symptoms. Breathing in vapour can result in headaches, dizziness and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgment and if exposure is prolonged, unconsciousness.
Long Term Effects:	No information available for the product. For the solvent evidence indicates that repeated or prolonged exposure to this chemical could result in central nervous system disorders.
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. Toluene: Oral LD50 (rat) 636 mg/kg, Inhalation LC50 (rat) 12.5-28.8 mg/l MEK: Oral LD50 (rat) 2737 mg/kg

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: III

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

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