

# MATERIAL SAFETY DATA SHEET: PROTECTAKOTE

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product Name: PROTECTAKOTE - moisture cured polyurethane coating

Company Name: Zest Polyurethanes (pty) Ltd  
13 Alternator Avenue, Montague Gardens 7441, Cape Town, South Africa

Emergency Tel: The Technical Manager, Telephone: +27 (021) 555 3090

## SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPOSITION: MIXTURE

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

ISOCYANATE 0.1 – 1.0% EEC Labels: XN R20,36/37/38,42  
OEL: (i) long term 0.02mg.m<sup>-3</sup> (8 hour TEWA reference period)  
(ii) short term 0.07mg.m<sup>-3</sup> (15 minute reference period)  
(iv) Sen (Sensitizer capable of causing occupational asthma)

XYLENE (XYLOL) 20 - 30% EEC Labels: Xn, Xi R10,20/21,38  
OEL: (i) long term: 50ppm / 220mg.m<sup>-3</sup>  
(ii) short-term: 100ppm / 441mg.m<sup>-3</sup>  
(iii) Sk (Can be absorbed through skin)  
(iv) BMGV (Biological Monitoring Guidance Value)

EC CLASSIFICATION: Xn Xi R10,36/37/38,42,51,65 S24/25,42,43,62

## SECTION 3. HAZARDS IDENTIFICATION

SAPMA HEALTH RATING: 2-MODERATE - Temporary or minor injury possible even if treatment is given.

Inhalation sensitizer

INHALATION: HARMFUL. Contains ISOCYANATE. Sensitizer with accumulative effects.

SKIN: Irritating, risk of dermatitis.

EYES: Irritating.

INGESTION: Irritating and nauseating.

NO CARCINOGENIC, MUTAGENIC OR GENETIC EFFECTS ESTABLISHED

May have short-term environmental effects. Contain, monitor & remove.

## SECTION 4. FIRST AID MEASURES

INHALATION: Move to fresh air. In case of any discomfort seek medical attention immediately.

SKIN: Use hand cleaner/soap & water. Remove contaminated clothing. If any discomfort get medical attention

EYES: Rinse well with water and seek medical advice if discomfort persists.

INGESTION: DO NOT INDUCE VOMITING. Get immediate medical attention.

## SECTION 5. FIRE FIGHTING MEASURES

Flammable with toxic fumes.

Containers can become pressurised if contents are contaminated with water.

Foam. CO<sub>2</sub>. Dry powder. Fog to cool and control. Do NOT use water jets.

Blown or distorted containers should be handled with extreme caution.

## SECTION 6. ACCIDENTAL RELEASE MEASURES - SEE ALSO SECTIONS 5, 8 & 13

Contain & collect. Keep out of drains and sewers

## SECTION 7. HANDLING AND STORAGE

Store separately from any reactive substances - oxidisers in particular.

FLAMMABLE. No open flames. No smoking.

OPEN WITH CARE! Cover lid / bung with a cloth while releasing pressure.

Generates CO<sub>2</sub> gas from reaction with water. Do not seal if contaminated with water due to danger of bursting.

DISPOSAL: Leave container unsealed for 3-4 days to solidify from atmospheric moisture. Once solid, container may be disposed of in landfill site. Consult local regulations.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits

Not established.

### Personal Protection

Respiratory Protection: cartridge-type respirator with cartridge for organic fumes (essential for spraying operations.)

Eye Protection: goggles or face shield

Hand protection: nitrile rubber gloves

Skin protection: overalls and safety boots

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	liquid
Flash Point (°C):	≥27°C
Viscosity (Krebs units):	68-82ku
Specific gravity:	1.01 – 1.07
Vapour density:	heavier than air
Boiling point (°C):	140°C
Solubility in water:	insoluble / reacts

## SECTION 10. STABILITY AND REACTIVITY

STATIC: Could produce static discharge - use earthing.

STABILITY: Stable if stored under normal conditions. When exposed to abnormally high temperatures containers will bulge and possibly burst. Hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke may be produced.

SOLUBILITY IN WATER: not soluble, reacts with generation of carbon dioxide gas.

## SECTION 11. TOXICOLOGICAL INFORMATION

NO CARCINOGENIC, MUTAGENIC OR GENETIC EFFECTS ESTABLISHED

Skin and Inhalation sensitizer.

### **Acute toxicity- short term exposure**

**MDI:** Low toxicity if swallowed. Oral toxicity for rats is >2000mg/kg. May cause gastrointestinal irritation. Eye contact may cause moderate eye irritation. May cause slight transient (temporal) corneal injury. Skin contact may cause slight to moderate irritation. May stain skin. The LD50 for skin absorption in rabbits is >2000mg/kg.

Inhalation: can cause severe irritation of the respiratory tract with burning sensation to the nose and throat. Effects can be delayed.

**XYLENE:** Oral toxicity (rats): LD50: 1.3g/kg. Humans: Harmful or fatal if swallowed. Eye irritant. Skin: practically non-irritating. Inhalation: harmful.

### **Repeated and long term exposure**

**MDI:** Respiratory sensitisation may occur. Chronic exposure by inhalation may result in a permanent decrease of lung function. May cause sensitisation by skin contact.

Carcinogenicity: Industrial experience in humans has not shown any links between MDI-based products and cancer development.

**XYLENE:** Prolonged skin contact with low viscosity materials such as Xylene may defat the skin resulting in possible irritation and dermatitis.

## SECTION 12. ECOLOGICAL INFORMATION

May have short-term environmental effects. Contain, monitor & remove.

## SECTION 13. DISPOSAL CONSIDERATIONS

Hazardous in liquid state. Solidify by reaction with water before disposal. Danger of bursting, do not seal. Use reputable waste disposal contractors. Destroy used containers. Consult local regulations.

## SECTION 14. TRANSPORT INFORMATION

UN No: 1263	PACKAGING GROUP: III	IMO CLASS: 3.3 MARINE POLLUTANT CLASS: P
EA CODE: 127	HAZCHEM CODE: 3 Y	KEMLER: 33
PROPER SHIPPING NAME: PAINT		

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## SECTION 15. REGULATORY INFORMATION

Conforms to EC regulation number 1907/2006 REACH, Annex II.

Conforms to US Navy Military spec MIL-PRF-32171A- Deck Coatings, high durability/QPL-32171.

EC LABEL NAME: PAINT

EC CLASSIFICATION: Flammable. Harmful.

EC SYMBOLS: XN HARMFUL

Xi: IRRITANT

EC Risk phrases: R10 Flammable  
R36/37/38 Irritating to eyes, respiratory system and skin  
R42 May cause sensitisation by inhalation  
R51 Toxic to aquatic organisms  
R65 Harmful: May cause lung damage if swallowed.

EC Safety phrases: S24/25 Avoid contact with skin and eyes  
S42 During spraying wear air supplied respirator.  
S43 In case of fire, use water fog, foam or powder - Do not use water jets!  
S62 If swallowed, do not induce vomiting : seek medical advice immediately show this container or label.

## SECTION 16. OTHER INFORMATION

CONTAINS ISOCYANATE - POTENTIAL SENSITISER - ENSURE PRECAUTIONS ARE TAKEN.

PAY SPECIAL ATTENTION TO STORAGE AND HANDLING REQUIREMENTS.

IN CASE OF ANY DISCOMFORT ALWAYS SEEK MEDICAL ADVICE.

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This MSDS conforms with General Administrative Regulations dated 6 Sept. 1996. (ISO-11014/ANSIZ400.1.1996)

All information is given in good faith but without guarantee in respect of accuracy.

No responsibility is accepted for errors or omissions or the consequences thereof.

These recommendations were extracted from the EcoChem database using the HAZMAN programme.

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