

MATERIAL SAFETY DATASHEET

Protectakote WB

Prepared in accordance with European Regulation 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: PROTECTAKOTE WB

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance: Water-based polyurethane coating

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Zest Polyurethanes

Alternator Avenue, Montague Gardens, Cape Town, South Africa, 7441, Tel: +27 (021) 555-3090

Further information obtainable from: The Technical Manager, Zest Polyurethanes. Email: zest@duram.co.za

1.4 Emergency telephone number: The Technical Manager, Zest Polyurethanes, Tel: +27 (021) 555-3090 (GMT 10:00-18:00)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture – according to Regulation (EC) No 1272/2008 [CLP]

Mixture.

Flammable Liquids - Not classified.

Skin Corrosion - mild irritant

Specific Target Organ Toxicity (Single Exposure); (Respiratory Tract Irritation) – Not classified.

Percentage of the Mixture consisting of ingredient(s) of Unknown Hazards to the Aquatic Environment: Less than 5%

2.2 GHS Label elements

Hazard Pictograms

Not applicable.

Signal Word: Safety

Hazard Statements:

H302 – Harmful if swallowed. H315 – Causes skin irritation

Precautionary Statements: (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements: (Response):

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do - continue rinsing.

Precautionary Statements: (Storage):

P403 + P233 Store in a well ventilated place. Keep container tightly closed.

Precautionary Statements: (Disposal):

P501 Dispose of contents/container to landfill site after solidification.

Labelling of special preparations: (GHS):

Not applicable.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

2.3 Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with non-hazardous additions

Hazardous ingredients (GHS) according to Regulation (EC) No 1272/2008 [CLP]					
No CAS number.	Synthetic copolymer solution, water-based	Not applicable. Polymer, non-hazardous.	30 –40% by mass		
CAS: 2687-91-4	N-ethyl-2-pyrrolidone	H227, H318, H360	<4.0% by mass		
CAS: 121-44-8	Triethylamine	H315, H319, H332, H335	< 0.2% by mass		

4. FIRST AID MEASURES

4.1 Description of first aid measures

After skin contact: Use hand cleaner/soap and water. Remove contaminated clothing. If skin irritation continues, consult a doctor. After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. After inhalation: Move to fresh air. In case of any discomfort, seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed No important symptoms.

4.3 Indication of any immediate medical attention and special treatment needed If ingested, do not induce vomiting. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Foam. Carbon dioxide. Dry powder. Fog to cool and control. Unsuitable extinguishing agents, for safety reasons: None.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Wear protective equipment and respirators. Blown or distorted containers should be handled with extreme caution.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Do not allow to enter drains or sewers / surface or ground water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid binding material (sand, diatomite, sawdust.)

6.4 Reference to other sections

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment. See section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Information about protection against fire and explosion: Water-based, non-flammable.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: Store away from water-sensitive materials, protect from frost. Further information about storage conditions: Keep containers tightly sealed.

7.3 Specific end use(s)

Open with care. Cover lid / bung with a cloth if hot while releasing pressure.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: Adequate ventilation. See items 7.1 and 7.2.

8.1 Control parameters

Ingredients with limit values that require monitoring in the workplace: Monitoring is not required. The product has no quantities of materials with critical values.

None.

8.2 Exposure controls

General protective and hygiene measures: Wash hands before breaks and at the end of work.

Personal protective equipment:



Respiratory protection:

A cartridge-type respirator with cartridge for organic fumes is essential for spraying operations.



Eye protection:

Wear tightly sealed goggles or face shield.



Hand protection:

Wear nitrile rubber gloves.

Material of gloves: The selection of suitable gloves also depends on marks of quality, which vary from manufacturer to manufacturer. The resistance of the glove material cannot be calculated in advance and therefore has to be checked prior to the time of application.

Penetration of glove material: Observe the exact breakthrough time supplied by the manufacturer.

Skin protection: Wear overalls and safety boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance:

Physical state Liquid
Colour Various
Odour Amine-like
Odour threshold Not determined
pH value: 7.0 - 8.0

Change in condition:

Melting point/Melting range ca. 0 °C
Boiling point/Boiling range 100 °C
Flash point Not applicable
Flammability (solid, gaseous) Not applicable.

Ignition temperature Not applicable Decomposition temperature Not determined

Self-igniting Product is not self-igniting.

Danger of explosion Product does not present an explosion hazard

Explosion limits:

Upper Not determined
Lower Not determined
Vapour pressure at 20 °C 23 hPa
Density at 20 °C 1.01 g/cm³
Relative density 1.01 (water = 1.00)
Vapour density Not determined
Evaporation rate Not determined

Solubility in / Miscibility with water Not miscible, reacts with water

Segregation coefficient (n-octanol/water) Not determined

Viscosity:

Dynamic at 20 °C 70 – 90 ku (Krebbs units)

Kinematic Not determined

Solvent content:

Organic solvents < 4.0 % by mass Water 35-50 % by mass Solids content 50 - 65 % by mass

9.2 Other information

No further relevant information available.

VOC (EU) $\leq 4.0 \text{ g/L}$

 $VOC\dot{V}$ $\leq 4.12\%$ by volume

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Stable if stored under normal conditions.

10.4 Conditions to avoid

When exposed to abnormally high temperatures containers will bulge and possibly burst.

10.5 Incompatible materials

None known other than water-sensitive materials.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: LD₅₀ / LC₅₀ values relevant for classification:

N-ethyl-2-pyrrolidone:		Triethylamine:	
Oral (LD ₅₀)	3200 mg/kg (rat)	Oral (LD ₅₀)	460 mg/kg (rat)
Dermal (LD ₅₀)	> 2000 mg/kg (rat)	Dermal (LD ₅₀)	570 mg/kg (rabbit)
Inhalation (LC ₅₀)	>5.1 mg/ℓ / 4 hours (rat)	Inhalation (LC ₅₀)	No information

No carcinogenic, mutagenic, or genetic effects have been established.

Primary irritant effect: Skin and eyes.

N-ethyl pyrrolldone

On the skin Not an Irritant.
On the eyes Risk of eye damage.

Orally Low toxicity.

Through inhalation Harmful. Can irritate the respiratory tract and cause headaches and giddiness.

Sensitisation: no sensitisation effects noted.

Tri-ethyl amine

On the skin Irritant.

On the eyes Hazardous Risk of serious eye damage.

Orally Slightly hazardous.

Through inhalation Harmful.

Sensitisation Sensitisation not indicated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Not harmful to aquatic environment. None of the components is persistent in the aquatic environment.

12.2 Persistence and degradability

Biodegradable. Once solidified, can be disposed of in landfill sites (consult local regulations).

12.3 Bioaccumulative potential

Not bioaccumulative.

12.4 Mobility in soil

Low mobility.

Additional ecological information:

General notes: Not generally considered to be harmful to terrestrial vertebrates. May have short-term environmental effects. Contain, monitor and remove.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation: Solidify by evaporation of the water content before disposal.

Rinse used containers well. Consult local official regulations.

European waste catalogue		
08 00 00	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks.	
08 01 00	Wastes from MFSU and removal of paint and varnish.	
08 01 11	Waste paint and varnish containing organic solvents or other dangerous substances.	

Uncleaned packaging

Recommendation: Leave container unsealed for 3 to 4 days to solidify by evaporation. Once solid, container may be disposed of in a landfill site. Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR, IMDG, IATA Not Applicable

14.2 UN proper shipping name

ADR Not Applicable IMDG, IATA Not Applicable

14.3 Transport hazard classes

ADR		IMDG, IATA	
No icon		No icon.	
Not hazardous.		Not hazardous.	
Class	Not regulated	Class	Not regulated
Label	void	Label	void

IMO class: void EA code: void HAZCHEM code: void

14.4 Packing group

ADR, IMDG, IATA void

14.5 Environmental hazards

Marine pollutant: ND (Not Dangerous)

14.6 Special precautions for user

Danger code (Kemler): void
EMS Number: void

14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC Code Not applicable

Transport/Additional information: For ADR and IMDG: Transport and packing are in

accordance with the regulation for limited quantities. This product is therefore non-dangerous goods.

ADR

Limited quantities (LQ) 1 L, 4 L and 5L Transport category not regulated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Compliant with REACH, CLP and GHS.

15.2 Chemical safety assessment

Chemical Safety Assessment not yet performed due to registration timelines. Exposure scenarios for the mixture cannot be provided at the moment because exposure scenarios are not yet available for all relevant substances due to registration timelines. For advice on essential measures see sections 7 and 8 of this safety data sheet.

16. OTHER INFORMATION

WATER-BASED PAINT. PROTECT FROM FROST.

IN CASE OF ANY DISCOMFORT FROM CONTACT WITH THE MIXTURE, ALWAYS SEEK MEDICAL ADVICE.

H phrases appearing in this document:

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H312 + H332: Harmful in contact with skin or inhaled

H318 Causes serious eye damage

H227 Combustible liquid

H332 Harmful if inhaled

H335 May cause respiratory irritation

H360 May damage the unborn child. Suspected of damaging fertility

Notice to Reader

Important Note: The information contained in this Data Sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and is believed to be correct at the date of its preparation. It is the user's responsibility to verify that this data sheet is current prior to using the product in which is detailed in it

Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to its use. Where those purposes are other than as specifically recommended in this safety data sheet, the user then uses the product at their own risk

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Updated: January 2016 (this supersedes all previous publications)