

Protectakote UVR Accelerator

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 UVR ACCELERATOR

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

Application of the substance: catalyst for urethane

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: Formbar Limited, Manor Farm Court Yard, West Hagbourne OX11 0ND. Tel: +44 (0)1235 850368

2. HAZARDS IDENTIFICATION

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

GHS classification

Acute toxicity - Oral Category 4

Acute toxicity - Inhalation Category 3

Acute toxicity - Dermal Category 3

Skin corrosion - Category 1B

2.2 GHS Label elements

Hazard Pictograms



Signal Word: Danger

Hazard Statements:

H302:Harmful if swallowed.

H311:Toxic in contact with skin.

H314:Causes severe skin burns and eye damage.

H331:Toxic if inhaled.

Precautionary Statements

Prevention :

P260:Do not breathe dust/fume/gas/mist/vapours/spray.

P264:Wash hands thoroughly after handling.

P271:Use only outdoors or in a well-ventilated area.

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

Response :

P301+P330+P331 :IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P304+P340 :IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 :IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 :Immediately call a POISON CENTRE/doctor.

Storage :

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

P405:Store locked up.

2.3 Other hazards

Hazards not otherwise classified:

Corrosive

Keep away from heat and sources of ignition.

Combustible Liquid.

Severe eye irritant.

Severe skin irritant.

Toxic in contact with skin.

Harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components			
Pentamethyldiethylenetriamine	CAS 3030-47-5	Concentration (Weight): 100%	EINECS: 221-201-1

CHEMICAL FAMILY: TERTIARY AMINE

4. FIRST AID MEASURES

4.1 General Advice

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

4.2 Eye Contact

Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

4.3 Skin Contact

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately.

4.4 Ingestion

Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

4.5 Inhalation

Move to fresh air.

4.6 Most important symptoms/effects – acute and delayed

Eye disease. Skin disorders and Allergies.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Alcohol-resistant foam. Carbon dioxide. Dry chemical. Dry Sand. Limestone powder.

5.2 Specific hazards

Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. In the event of fire, cool tanks with water spray. Downwind personnel must be evacuated. Fire or intense heat may cause violent rupture of packages. Flash back possible over considerable distance. May form explosive mixtures in air.

5.3 Special protective equipment for firefighters

Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire-fighting if necessary.

5.4 Further Information

Do not allow run-off from firefighting to enter drains or water courses., Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Remove all sources of ignition. Evacuate personnel to safe areas.

6.2 Environmental precautions: Shut off or remove all ignition sources. Construct a dike to prevent spreading.

6.3 Methods and material for containment and cleaning up: Call Emergency Response number for advice. Approach suspected leak areas with caution. Absorb with inert absorbent materials such as: Dry sand. Vermiculite. Activated charcoal. Place in appropriate chemical waste container.

Additional advice: If possible, stop flow of product

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

See "Flammable and Combustible Liquid Code" NFPA No. 30, National Fire Protection Association, Boston, MA. Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Do not store near acids. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep in a dry, cool place. Keep away from oxidizers. Recommended suitable container materials include plastic, stainless, and carbon steels.

7.3 Technical measures and precautions

Keep away from open flames, hot surfaces and sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures

Apply process controls to ensure safe operating conditions. Assess potential flammability hazards based on flashpoint and potential ignition sources. Ensure adequate ventilation. Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

Respiratory protection : Wear appropriate respirator when ventilation is inadequate. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection : Butyl-rubber Nitrile rubber. Neoprene gloves. Polyvinyl Alcohol Gloves (PVA). Impervious gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection : Full face shield with goggles underneath. Chemical resistant goggles must be worn.

Hand protection : Nitrile rubber. Impervious gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Skin and body protection : Slicker Suit. Impervious clothing. Full rubber suit (rain gear). Rubber or plastic boots. Long sleeve shirts and trousers without cuffs.

Environmental exposure controls:

Shut off or remove all ignition sources.

Special instructions for protection and hygiene:

Discard contaminated leather articles. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid. Colorless.

Odor : Ammoniacal.

Odor threshold: No data available.

pH: Alkaline.

Melting point/range: No data available.

Boiling point/range: 394 °F (201 °C)

Flash point: 161 °F (71.67 °C)

Evaporation rate: No data available.

Flammability (solid, gas): Not applicable.

Upper/lower explosion/flammability limit: 5.6 %(V) / 1.1 %(V)

Vapor pressure: 0.30 mmHg at 70 °F (21 °C)

Water solubility: Completely soluble.

Relative vapor density: 21.8987 (air = 1)

Relative density: 0.85 (water = 1)

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: 155 °C

Decomposition temperature: No data available.

Viscosity: No data available.

Molecular Weight: 173 g/mol

Density: 53.064 lb/ft³ (0.85 g/cm³) at 70 °F (21 °C)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.

Conditions to avoid: Heat, flames and sparks.

Materials to avoid : Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.

Hazardous decomposition products: Nitric acid. Ammonia Nitrogen oxides (NO_x). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO₂).

Possibility of hazardous Reactions/Reactivity: No data available.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Likely routes of exposure

Effects on Eye: Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucopsia (corneal edema) when absorbed into the tissue of the eye from the atmosphere. Causes eye burns. May cause blindness. Severe eye irritation.

Effects on Skin: Causes skin burns. Toxic in contact with skin.

Inhalation Effect: Can cause severe eye, skin and respiratory tract burns.

Ingestion Effects: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Harmful if swallowed.

Symptoms: No data available.

Acute toxicity

Acute Oral Toxicity: LD50 : 1,630 mg/kg Species : Rat.

Inhalation: LC50 (6 h) : 290 ppm Species : Rat.

Acute Dermal Toxicity: LD50 : 280 mg/kg Species : Rabbit.

Skin corrosion/irritation: Severe skin irritation.

Serious eye damage/eye irritation: Severe eye irritation.

Sensitisation: No data available.

Chronic toxicity or effects from long term exposures

Carcinogenicity No data available.

Reproductive toxicity No data is available on the product itself.

Germ cell mutagenicity: No data is available on the product itself.

Specific target organ systemic toxicity (single exposure): No data available.

Specific target organ systemic toxicity (repeated exposure): No data available.

Aspiration hazard: No data available.

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Eye disease., Skin disorders and Allergies.

Corneal opacities were observed in rats exposed to 12 ppm during a two-week inhalation study., In the same study, exposures to 48 ppm also yielded cloudy corneas and skin and upper respiratory tract irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity: LC50 (96 h) : 220 mg/l Species : Golden orfe (*Leuciscus idus*).

Toxicity to daphnia - Components Pentamethyldiethylenetriamine EC50 (48 h) : 76 mg/l Species: *Daphnia magna*.

Toxicity to other organisms: No data available.

Persistence and Biodegradability : No data is available on the product itself.

Mobility : No data available.

Bioaccumulation : No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: The product should not be allowed to enter drains, water courses or the soil; dispose of this material and its container in a safe way. Contact supplier if guidance is required.

Contaminated packaging: Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

DOT

UN/ID No. : UN2922 Proper shipping name : Corrosive liquids, toxic, n.o.s., (Pentamethyldiethylenetriamine) Class or Division : 8
Packing group : II Label(s) : 8 (6.1) Marine Pollutant : No

IATA

UN/ID No. : UN2922 Proper shipping name : Corrosive liquid, toxic, n.o.s., (Pentamethyldiethylenetriamine) Class or Division : 8
Packing group : II Label(s) : 8 (6.1) Marine Pollutant : No

IMDG

UN/ID No. : UN2922

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S., (Pentamethyldiethylenetriamine) Class or Division : 8 Packing group : II
Label(s) : 8 (6.1) Marine Pollutant : No

TDG

UN/ID No. : UN2922 Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S., (Pentamethyldiethylenetriamine) Class or Division : 8
Packing group : II Label(s) : 8 (6.1) Marine Pollutant : No

Further Information The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact customer service.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA) 12(b) Component(s):

None.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification Acute Health Hazard Fire Hazard.

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

16. OTHER INFORMATION

HMIS Rating

Health : 3
Flammability : 2
Physical hazard : 0

Prepared by : Zest Polyurethanes

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Preparation Date : 26/07/2017

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

Manufacturer's Disclaimer: The Conditions methods and Factors effecting the handling, storage, application, use, misuse or disposal of the product are not under the control or knowledge of the Manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events that may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law the manufacturer expressly disclaims liability for any and all losses, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

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