## MATERIAL SAFETY DATASHEET

# **Protectakote 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 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]

Skin corrosion - Category 1C

Serious Eye Damage - Category 1

Skin sensitization - Category 1

Germ cell mutagenicity - Category 2

Reproductive toxicity - Category 1B

Specific target organ toxicity - repeated exposure - Oral Category 1

#### 2.2 GHS Label elements

## **Hazard Pictograms**



Signal Word: Danger

#### **Hazard Statements:**

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects

H360: May damage fertility or the unborn child

H372a: Causes damage to organs through prolonged or repeated exposure if swallowed.

## Precautionary Statements: (Prevention):

P201:Obtain special instructions before use.

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

P264:Wash hands thoroughly after handling.

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

P281:Use personal protective equipment as required.

Precautionary Statements: (Response):

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

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

P308 + P313: IF exposed or concerned: Get medical advice/attention.

P310: Immediately call a POISON CENTRE/doctor.

Precautionary Statements: (Storage): P405: Store locked up..

#### 2.3 Other hazards

Hazards not otherwise classified:

Corrosive

Reproductive toxin.

May cause sensitization by skin contact.

Suspected of causing genetic defects.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Components</u>			
CAS: 77-58-7	Dibutyltin dilaurate	Concentration (Weight): >95%	EINECS: 215-535-7

CHEMICAL FAMILY: ORGANOTIN

#### 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

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. Move to fresh air.

#### 4.6 Most important symptoms/effects – acute and delayed

Eye disease. Skin disorders and Allergies. Asthma, Kidney disorders. Liver Disorders.

## **Immediate Medical Attention and Special Treatment**

#### 4.7 Treatment

NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

## 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. Burning produces noxious and toxic fumes.

## 5.3 Special protective equipment for firefighters

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

#### 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, 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

Ensure adequate ventilation. Hazardous in liquid state. Solidify by reaction with water before disposal.

## 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: Flammable. No open flames. No smoking.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: Store separately from any reactive substances, especially oxidisers. Information about storage in one common facility: As above.

Further information about storage conditions: Keep containers tightly sealed.

## 7.3 Specific end use(s)

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

Generates carbon dioxide gas from reaction with water. Do not seal if contaminated with water due to danger of bursting.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Engineering measures**

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.

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.

Eye protection: Full face shield with goggles underneath.

Skin and body protection: Slicker Suit. Impervious clothing. Full rubber suit (rain gear). Rubber or plastic boots.

Environmental exposure controls

: Use appropriate containment to avoid environmental contamination. Do not allow spill to enter into sewers or waterways.

Special instructions for protection and hygiene

: Provide readily accessible eye wash stations and safety showers.

Exposure limit(s)

Dibutyltin dilaurate Time Weighted Average (TWA): ACGIH - 0.1 mg/m3

Dibutyltin dilaurate Short Term Exposure Limit (STEL): ACGIH - 0.2 mg/m3

Dibutyltin dilaurate Permissible exposure limit: OSHA Z1 - 0.1 mg/m3

Dibutyltin dilaurate Time Weighted Average (TWA): OSHA Z1A - 0.1 mg/m3

Dibutyltin dilaurate Time Weighted Average (TWA) Permissible Exposure Limit (P

EL): US CA OEL - 0.1 mg/m3

Dibutyltin dilaurate Short Term Exposure Limit (STEL): US CA OEL - 0.2 mg/m3 Dibutyltin dilaurate Recommended exposure limit

(REL): NIOSH - 0.1 mg/m3

Dibutyltin dilaurate Time Weighted Average (TWA): TN OEL - 0.1 mg/m3

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 General information

## Appearance:

Liquid. Light yellow. Odor: Fatty.

Odor threshold: No data available. pH: No data available.

#### Change in condition:

Melting point/range: No data available. Boiling point/range: > 401 °F (> 205 °C) Flash point: > 400 °F (> 204.44 °C) Evaporation rate: No data available. Flammability (solid, gas): Not applicable.

Upper/lower explosion/flammability limit

: Not applicable.

Vapor pressure : < 5.00 mmHg at 70 °F (21 °C)

Water solubility: Insoluble.

Relative vapor density: 21.76

Relative density: 1.03 (water = 1)

Partition coefficient (noctanol/water)

: No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Molecular Weight: 631 g/mol

Density: 64.301 lb/ft3 (1.03 g/cm3) at 70 °F (21 °C)

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.

Conditions to avoid: Exposure to sunlight.

Materials to avoid: Oxidizing agents.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide (CO2). Tin oxide. Organic acid vapors.

Possibility of hazardous Reactions/Reactivity : No data available

#### 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Likely routes of exposure

Effects on Eye: Causes eye burns. May cause blindness.

Effects on Skin: Contact of undiluted product with skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury. Causes skin burns.

Inhalation Effects: Can cause severe eye, skin and respiratory tract burns. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Inhalation of aerosol may cause irritation to the upper respiratory tract.

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

Symptoms: No data available.

Acute toxicity

Acute Oral Toxicity: LD50: > 2,000 mg/kg Species: Rat.

Inhalation: No data is available on the product itself.

Acute Dermal Toxicity: LD50: > 2,000 mg/kg Species: Rabbit.

Method: Estimated.

Skin corrosion/irritation: Causes skin burns.

Serious eye damage/eye irritation : Risk of serious damage to eyes.

Sensitization.: May cause sensitization by skin contact.

Chronic toxicity or effects from long term exposures

Carcinogenicity: No data available.

Reproductive toxicity: Dibutyltin compounds have shown reproductive and immunotoxic effects in laboratory animals.

Germ cell mutagenicity: Suspected of causing genetic defects

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.Reproductive toxin., May cause allergic skin reaction.Eye disease., Skin disorders and Allergies., Asthma., Kidney disorders., Liver disorders.

Abnormalities noted at necrospy of animals treated with 2000 mg/kg of dibutyltin dilaurate were haemorrhagic lungs, dark liver, dark kidneys, haemorrhage of gastric mucosa, haemorrhage of the large and small intestines, enlarged bile duct and behavioral and central nervous system effects. Decreased fertility was seen in hens following dietary administration equal to 78 mg/kg.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity: No data is available on the product itself.

Toxicity to fish - Components Dibutyltin dilaurate LC50 : 2 mg/l Species : Fish.

Toxicity to daphnia - Components

Safety Data Sheet Version 6.0 SDS Number 300000008820 Revision Date 01/26/2017 Print Date 07/01/2017

8/10 Evonik Corporation - Division PMD DABCO ® T-12 Catalyst

Dibutyltin dilaurate EC50 : 2.28 mg/l Species : Daphnia magna.

Toxicity to other organisms: No data available.

Persistence and degradability

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.: UN1760 Proper shipping name: Corrosive liquids, n.o.s., (Dibutyltin dilaurate) Class or Division: 8 Packing group: III Label(s): 8 Marine Pollutant: Yes

\*\* NOTE: This product contains a substance that is regulated as a Marine Pollutant when transported in bulk packages (liquid – volume exceeding 450 liters, gas – water capacity exceeding 454 kilograms).

IATA

UN/ID No.: UN1760 Proper shipping name: Corrosive liquid, n.o.s., (Dibutyltin dilaurate) Class or Division: 8 Packing group: III Label(s): 8 Marine Pollutant: Yes

\*\* NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment.

**IMDG** 

UN/ID No. : UN1760 Proper shipping name : CORROSIVE LIQUID, N.O.S., (Dibutyltin dilaurate) Class or Division : 8 Packing group : III Label(s) : 8 Marine Pollutant : Yes

\*\* NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aquatic environment.

**TDG** 

UN/ID No. : UN1760 Proper shipping name : CORROSIVE LIQUID, N.O.S., (Dibutyltin dilaurate) Class or Division : 8 Packing group : III Label(s) : 8 Marine Pollutant : Yes

\*\* NOTE: This product contains a substance that: 1) is regulated as a Marine Pollutant, or 2) meets the definition of toxic to the aguatic environment.

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. **ENCS** Japan Included on Inventory. South Korea **ECL** Included on Inventory. China **SEPA** Included on Inventory. **PICCS Philippines** Included on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification Acute Health Hazard Chronic Health 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: 1 Physical hazard: 0

REVISION NOTES: 2. HAZARDS IDENTIFICATION

Sensitization

Chronic Health Hazard

Prepared by : Zest Polyurethanes

Telephone: +27-21-5553090

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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