

Safety Data Sheet

prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier T-ST0010B Revision Date: 08/11/2024

Product Name: SOLARTHANE PART B Supersedes Date: New SDS

1.2 Relevant identified uses of the

substance or mixture and uses advised against

Hardener for 2 components coatings - Industrial use. Advised against: others than

recommended

1.3 Details of the supplier of the safety data sheet

Importer: Importer

Manufacturer: StonCor Africa (Pty.) Ltd.

8 Cresset Road

Midrand Industrial Park, Chloorkop

P.O. Box 2205 2001, Johannesburg

South Africa

Regulatory / Technical Information:

+27 11 254 5500

Datasheet Produced by: Muller, Riaan - ehs@stoncor.com

1.4 Emergency telephone number: CHEMTREC 1-800-424-9300 (Inside US)

CHEMTREC +1 703 5273887 (Outside US)

Giftinformasjonen: +47 22 59 13 00

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4
Flammable Liquid, category 3
Skin Sensitizer, category 1
STOT, single exposure, category 3, RTI

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

homopolymer of hdi

HAZARD STATEMENTS

| Flammable Liquid, category 3 Skin Sensitizer, category 1 Acute Toxicity, Inhalation, category 4 STOT, single exposure, category 3, RTI | H226 H317 H332 H335 | Flammable liquid and vapour. May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. |
|--|------------------------------|---|
| PRECAUTION PHRASES | | |
| | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| | P280 | Wear protective gloves/protective clothing/eye protection/ face protection. |
| | P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| | P304+340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| | P333+313 | If skin irritation or rash occurs: Get medical advice/attention. |
| | P403+233 | Store in a well-ventilated place. Keep container tightly closed. |

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous ingredients

| Name According to EEC homopolymer of hdi | EINEC No. | CAS-No. | <u>%</u> | Classifications | Acute Tox. 4 Inhalation, Skin |
|--|-----------|------------|----------|-----------------|-------------------------------|
| | 500-060-2 | 28182-81-2 | 80-<100 | H317-332-335 | Sens. 1, STOT SE 3 RTI |
| n-butyl acetate | 204-658-1 | 123-86-4 | 10 - <30 | H225-336 | Flam. Liq. 2, STOT SE 3 NE |

CAS-No. 28182-81-2 123-86-4 M-Factors

Additional Information:

The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice. **AFTER INHALATION:** Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required. No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

Reacts violently with water.

5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Water spray Dry powder Alcohol-resistant foam Carbon dioxide (CO2). Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Keep the container open.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(EU)

| Name | CAS-No. | LTEL ppm | STEL ppm | STEL mg/m3 | LTEL mg/m3 |
|--------------------|------------|----------|----------|------------|------------|
| homopolymer of hdi | 28182-81-2 | | | | |
| n-butyl acetate | 123-86-4 | 50 | 150 | 723 | 241 |
| <u>Name</u> | CAS-No. | OEL Note | | | |
| homopolymer of hdi | 28182-81-2 | | | | |
| n-butyl acetate | 123-86-4 | | | | |

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with a vapor filter.

EYE PROTECTION: Tightly fitting safety goggles.

HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Body Protection: Long sleeved clothing.

Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined

Not determined

areas.

Odor threshold

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Clear liquid

Physical State Liquid

Odor Solvent like

pH Not determined

Melting point / freezing point (°C) Not determined

Boiling point/range (°C) 160 - 160

Flash Point, (°C) 50

Evaporation rate Slower than ether
Flammability (solid, gas) Not determined

Upper/lower flammability or explosive 1 - 7,5

limits

Vapour Pressure Not determined

Vapour density Heavier than air

Relative density 1.10 - 1.14

Solubility in / Miscibility with water Reacts

Partition coefficient: n-octanol/water

Not determined

Auto-ignition temperature (°C)

Not determined

Decomposition temperature (°C)

Not determined

Viscosity

Not determined

Explosive properties

Not determined

Not determined

Explosive properties Not determined

Oxidising properties

Not determined

9.2 Other information

VOC Content g/l: 328

Calculated grams Of VOC per liter Of coating product As applied.

Specific Gravity (g/cm3) 0,120

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions. Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Risk of ignition.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Direct sources of heat.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information Inhalation LC50: No information

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

| CAS-No. | Chemical Name | Oral LD50 | Dermal LD50 | Vapor LC50 | Gas LC50 | Dust/Mist LC50 |
|------------|--------------------|---------------------------|-------------|---------------------------------------|----------|----------------|
| 28182-81-2 | homopolymer of hdi | 5000 mg/kg, oral, rat | | 18500 mg/ m3/1H inhalation, rat | 0.000 | 0.000 |
| 123-86-4 | n-butyl acetate | 10760 mg/kg, rat, oral | | 23.4 mg/l/4/h (rat) | 0.000 | 0.000 |

Additional Information:

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

assessment:

12.6 Other adverse effects: No information

CAS-No. Chemical Name EC50 48hr IC50 72hr LC50 96hr

28182-81-2 homopolymer of hdi No information No information

123-86-4 n-butyl acetate No information No information

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number UN 126314.2 UN proper shipping name Paint

Technical name Not applicable

14.3 Transport hazard class(es) 3

Subsidiary shipping hazard Not applicable

14.4 Packing group PG III

14.5 Environmental hazards Not applicable
 14.6 Special precautions for user Not applicable
 EmS-No.: Not applicable
 14.7 Transport in bulk according to Annex II of Not applicable

MARPOL 73/78 and the IBC code

15. Regulatory Information

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

National Regulations:

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number: Not available

Norway Product Registration Number: Not available

WGK Class: Not available

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Reasons for revision

No Information

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million
mg/m3 Milligrams per cubic meter
TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration

IC50 Half maximal inhibitory concentration

PBT Persistent bioaccumulative toxic chemical vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container
RTI Respiratory Tract Irritation

NE Narcotic Effects

IMO International Maritime Organization

Note P: The classification as a carcinogen or mutagen need not apply; the substance

contains less than 0,1 % w/w benzene

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in

powder form containing 1 % or more of titanium dioxide which is in the form of

or incorporated in particles with aerodynamic diameter \leq 10 μm .

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.