



Safety Data Sheet according to Regulation (EC) 'No. 2020/878

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

| | | | |
|--|--|-------------------------|------------|
| 1.1 Product Identifier | 01500Z/ISO | Revision Date: | 02/02/2023 |
| Product Name: | STONCLAD UF ISOCYANATE | Supersedes Date: | 02/02/2023 |
| CAS Number: | 9016-87-9 | Version Number: | 3 |
| EC Number: | 618-498-9 | | |
| Index Number: | | | |
| REACH Reg No. | | | |
| Sector of Use Code: | No Information | | |
| UFI Code: | No Information | | |
| Nanoform: | No | | |
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | For use by appropriately trained applicators. Hardener for 2 component coatings - Professional use only. Please see Technical Data Sheet. Advised against: others than recommended | | |
| 1.3 Details of the supplier of the safety data sheet | | | |
| Importer: | None | | |
| Manufacturer: | Stonhard Europe 9 Rue du Travail 1400 Nivelles Belgium | | |
| | Regulatory / Technical Information: +32 67493710 Nivelles, Belgium | | |
| Datasheet Produced by: | ehs-eu@stonhard.com | | |
| 1.4 Emergency telephone number: | CHEMTREC +1 703 5273887 (Outside US) PPC +1 412 6816669 (Outside US) Centro Antiveleni di Milano Tel+39 02 66101029 (CAV - Grande Ospedale Metropolitano Niguarda - Milano)(24h/24h) Emergenza ambientale +39 335-601 32 88 / +39 347-949 84 88 / +39 348-246 90 99 | | |

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

| | |
|--|------|
| Skin Irritation, category 2 | H315 |
| Skin Sensitizer, category 1 | H317 |
| Eye Irritation, category 2 | H319 |
| Acute Toxicity, Inhalation, category 4 | H332 |
| Respiratory Sensitizer, category 1 | H334 |
| STOT, single exposure, category 3, RTI | H335 |
| Carcinogenicity, category 2 | H351 |
| STOT, repeated exposure, category 2 | H373 |

2.2 Label elements**Symbol(s) of Product****Signal Word**

Danger

Named Chemicals on Label

Diphenylmethane-diisocyanate, isomers and homologues

HAZARD STATEMENTS

| | | |
|--|------|--|
| Skin Irritation, category 2 | H315 | Causes skin irritation. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled. |
| Respiratory Sensitizer, category 1 | H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation. |
| Carcinogenicity, category 2 | H351 | Suspected of causing cancer. |
| STOT, repeated exposure, category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |

PRECAUTION PHRASES

| | |
|----------------|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| 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 so. Continue rinsing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention |

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.

Endocrine disrupting properties - Toxicity

Name According to EEC

CAS-No.

No Information

Endocrine disrupting properties - Ecotoxicity

Name According to EEC

CAS-No.

No Information

SECTION 3: Composition/Information On Ingredients**3.1 Substances****Hazardous ingredients**

| <u>Name According to EEC</u> <u>EINEC No.</u> <u>CAS-No.</u> <u>REACH Reg No.</u> | <u>%</u> | <u>Classifications</u> | <u>SCL Value:</u> <u>ATE Value:</u> <u>M-Factor:</u> |
|---|----------|--|--|
| Diphenylmethane-diisocyanate, isomers and homologues 618-498-9 9016-87-9 No Information | 75-100 | H315-317-319-332-334-335-351-373 Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT RE 2, STOT SE 3 RTI | SCL Value: - ATE Value: - M-Factor: - |

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 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.

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

AFTER INGESTION: Do NOT induce vomiting. 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

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

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting 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

Heating or fire can release toxic gas.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. ABC powder. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Water reactive

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment.

6.1.2 For emergency responders

No Information

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

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

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. 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.

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: Avoid dust accumulation in enclosed space. Keep from any possible contact with water.

STORAGE CONDITIONS: Store in original container. Keep container tightly closed in a dry and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (UK WELS)

| Name | CAS-No. | LTEL ppm | STEL ppm | STEL mg/m3 | LTEL mg/m3 |
|--|-----------|----------|----------|------------|------------|
| Diphenylmethane-diisocyanate, isomers and homologues | 9016-87-9 | | | | 0.02 |

| Name | CAS-No. | OEL Note |
|--|-----------|----------|
| Diphenylmethane-diisocyanate, isomers and homologues | 9016-87-9 | |

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

Chemical Name:

EC No.:

CAS-No.:

DNELs - Derived no effect level

| Route of Exposure | Workers | | | | Consumers | | | |
|-------------------|--------------------|------------------------|-----------------------|--------------------------|--------------------|------------------------|-----------------------|--------------------------|
| | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic | Acute effect local | Acute effects systemic | Chronic effects local | Chronic effects systemic |
| Oral | Not required | | | | | | | |
| Inhalation | | | | | | | | |
| Dermal | | | | | | | | |

PNEC's - Predicted no effect concentration

| | PNEC |
|--|------|
| Environmental protection target | |
| Fresh water | |
| Fresh water sediments | |
| Marine water | |
| Marine sediments | |
| Food chain | |
| Microorganisms in sewage treatment soil (agricultural) | |
| Air | |

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with combination filter for vapour/particulate (EN 14387:2004+A1:2008): A1-P3. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with a vapour filter (EN 14387:2004+A1:2008). Respirator with a vapor filter.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Safety goggles. Tightly fitting safety goggles.

HAND PROTECTION: Impervious gloves. Protective gloves complying with EN 374. 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 areas.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| | |
|----------------|--------|
| Colour: | AMBER |
| Physical State | Liquid |
| Odor | SLIGHT |
| Odor threshold | n/a |

| | |
|---|---------------------------------|
| pH | n/a |
| Melting point / freezing point (°C) | Not determined |
| Boiling point or initial boiling point and boiling range (°C) | 300 - 300 |
| Flash Point, (°C) | 200 |
| Evaporation rate | n/a |
| Flammability (solid, gas) | n/a |
| Lower and upper explosive limit | Not determined - Not determined |
| Vapour Pressure | n/a |
| Relative vapour density | n/a |
| Density and/or relative density | 1.24 |
| Solubility in / Miscibility with water | reacts with water |
| Partition coefficient: n-octanol/water | n/a |
| Auto-ignition temperature (°C) | >500 |
| Decomposition temperature (°C) | n/a |
| Kinematic viscosity | 120 mPas |
| Particle characteristics | Not applicable to liquids |

9.2 Other information

| | |
|--|------|
| VOC Content g/l: | 0.00 |
| Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2. | |
| Specific Gravity (g/cm ³) | 1.24 |

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Avoid dust accumulation in enclosed space. Keep from any possible contact with water.

10.5 Incompatible materials

Reacts violently in contact with acids, amines, driers, polymerisation accelerators and easily oxidized materials. Contact with water or moist air liberates irritating gas.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute Toxicity:

| | |
|------------------|---------------------------|
| Oral LD50: | No information available. |
| Inhalation LC50: | No information available. |
| Dermal LD50: | 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:

| <u>CAS-No.</u> | <u>Name According to EEC</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> | <u>Gas LC50</u> | <u>Dust/Mist LC50</u> |
|----------------|--|--------------------------|------------------------------|-------------------|-----------------|-----------------------|
| 9016-87-9 | Diphenylmethane-diisocyanate, isomers and homologues | >10000 mg/kg (oral, rat) | >9400 mg/kg (dermal, rabbit) | No information | No information | No information |

Additional Information:

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

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

| Name According to EEC | CAS-No. |
|-----------------------|---------|
| No Information | |

SECTION 12: Ecological Information

12.1 Toxicity:

| | |
|----------------------|----------------|
| EC50 48hr (Daphnia): | No information |
| IC50 72hr (Algae): | No information |
| LC50 96hr (fish): | 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 assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

| Name According to EEC | CAS-No. |
|------------------------------|----------------|
| No Information | |

12.7 Other adverse effects: No information

| <u>CAS-No.</u> | <u>Name According to EEC</u> | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------------|--|------------------|------------------|------------------|
| 9016-87-9 | Diphenylmethane-diisocyanate, isomers and homologues | No information | 1640 mg/L | >1000 mg/L |

| |
|--|
| SECTION 13: Disposal Considerations |
|--|

13.1 WASTE TREATMENT METHODS: Dispose of as hazardous waste in compliance with local and national regulations. 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.

European Waste Code: 080111*
Packaging Waste Code: 150110

SECTION 14: Transport Information

| | ADR/RID | ADN | IMDG | IATA |
|--|---|---|---|---|
| 14.1 UN-number or ID number | No Information | No Information | No Information | No Information |
| 14.2 UN proper shipping name | Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations. | Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations. | Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations. | Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations. |
| 14.3 Transport Hazard Class(es) | No Information | No Information | No Information | No Information |
| 14.4 Packing Group | No Information | No Information | No Information | No Information |
| 14.5 Enviromental Hazards | No Information | No Information | No Information | No Information |

- 14.6 Special precautions for user** Not applicable
EmS-No.: Not applicable
- 14.7 Maritime transport in bulk according to IMO intruments** Not applicable

SECTION 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
- Germany WGK Class:** Not available
- Directive 2004/42/CE :** 5
- Covered by Directive 2012/18/EC (Seveso III):** Not applicable

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006: Not applicable

Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

CAS-No. Name According to EEC

Not Applicable

15.2 Chemical Safety Assessment:

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

SECTION 16: Other Information

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

| | |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

01 - Identification

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

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 of the product is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the exact 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 $\leq 10 \mu\text{m}$. |

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.