



Das Original

DIRKO HT

Safety Data Sheet

according to Regulation (EU) No. 2015/830

Date of issue: 09/04/2014

Revision date: 10/11/2017

Version: 3.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Product name : DIRKO HT

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

1.2.1. Relevant identified uses

Intended for general public
 Use of the substance/mixture : Sealants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ElringKlinger AG
 Max-Eyth-Straße 2
 72581 Dettingen/Erms
 Germany

Information contact: E-mail: det.iam.sdb@elringklinger.com

Safety Data Sheet: DLAC Dienstleistungsagentur Chemie GmbH, E-mail: sds@dlac-gmbh.de

1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number |
|---------|--|---|-----------------------------------|
| Germany | Giftinformationszentrum (GIZ-Nord) Zentrum Pharmakologie und Toxikologie der Universität Göttingen | Robert-Koch Strasse 40 D-37075 Göttingen | +49 551 19240 (German/English) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH phrases : EUH210 - Safety data sheet available on request

2.3. Other hazards

PBT: not relevant - no registration required

vPvB: not relevant - no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------|---|---------|--|
| Diiron trioxide | (CAS No) 1309-37-1 (EC No) 215-168-2 (REACH-No) 01-2119457614-35 | 20 - 30 | Not classified |
| Silicon dioxide | (CAS No) 112945-52-5 | 1 - 5 | Not classified |
| Triacetoxymethylsilane | (CAS No) 17689-77-9 (EC No) 241-677-4 (REACH-No) 01-2119881778-15 | < 5 | Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 |
| Methylsilanetriyl triacetate | (CAS No) 4253-34-3 (EC No) 224-221-9 (REACH-No) 01-2119962266-32 | < 5 | Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 |

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| Name | Product identifier | Specific concentration limits according Expert judgment |
|------------------------------|---|--|
| Triacetoxylethylsilane | (CAS No) 17689-77-9 (EC No) 241-677-4 (REACH-No) 01-2119881778-15 | (10 =< C < 25) Skin Irrit. 2, H315 (10 =< C < 25) Eye Irrit. 2, H319 (C >= 25) Skin Corr. 1B, H314 |
| Methylsilanetriyl triacetate | (CAS No) 4253-34-3 (EC No) 224-221-9 (REACH-No) 01-2119962266-32 | (10 =< C < 25) Skin Irrit. 2, H315 (10 =< C < 25) Eye Irrit. 2, H319 (25 >=) Skin Corr. 1C, H314 |

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Remove/Take off immediately all contaminated clothing. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : Wipe off dry product from skin. Wash with plenty of soap and water. The product is not considered to be irritating to the skin.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Drink plenty of water as a precaution. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Making extinguishing agents environment-friendly. Carbon dioxide. Extinguishing powder. Water spray. For a significant fire: alcohol resistant foam.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

- Firefighting instructions : Prevent fire-fighting water from entering environment.
- Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Provide adequate ventilation.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

No particular/specific measures required.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Remove contaminated clothes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. When using do not eat, drink or smoke.

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7.2. Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| Storage conditions | : Keep container tightly closed. Store in a dry place. Store in a cool, well-ventilated place. |
| Incompatible materials | : Direct sunlight. Heat sources. |
| Storage temperature | : 15 - 25 °C |
| Prohibitions on mixed storage | : Keep away from food, drink and animal feedingstuffs. |

7.3. Specific end use(s)

Sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Diiron trioxide (1309-37-1) | | |
|-----------------------------|--|--|
| United Kingdom | Local name | Iron oxide, fume (as Fe) |
| United Kingdom | WEL TWA (mg/m ³) | 5 mg/m ³ |
| United Kingdom | WEL STEL (mg/m ³) | 10 mg/m ³ |
| Ireland | Local name | Iron oxide, fume (as Fe) |
| Ireland | OEL (8 hours ref) (mg/m ³) | 5 mg/m ³ |
| Ireland | OEL (15 min ref) (mg/m ³) | 10 mg/m ³ |
| Silicon dioxide (-) | | |
| United Kingdom | Local name | Silica, amorphous |
| United Kingdom | WEL TWA (mg/m ³) | 6 mg/m ³ inhalable dust 2.4 mg/m ³ respirable |
| Ireland | Local name | Silica, amorphous |
| Ireland | OEL (8 hours ref) (mg/m ³) | 6 mg/m ³ inhalable dust 2.4 mg/m ³ respirable |

Exposure limit values for the other components

| Acetic acid ... % (64-19-7) | | |
|-----------------------------|--|----------------------|
| EU | IOELV TWA (mg/m ³) | 25 mg/m ³ |
| EU | IOELV TWA (ppm) | 10 ppm |
| EU | IOELV STEL (mg/m ³) | 50 mg/m ³ |
| EU | IOELV STEL (ppm) | 20 ppm |
| Ireland | Local name | Acetic acid |
| Ireland | OEL (8 hours ref) (mg/m ³) | 25 mg/m ³ |
| Ireland | OEL (8 hours ref) (ppm) | 10 ppm |
| Ireland | OEL (15 min ref) (mg/m ³) | 37 mg/m ³ |
| Ireland | OEL (15 min ref) (ppm) | 15 ppm |
| Ireland | Notes (IE) | IOELV |
| Malta | Local name | Acetic acid |
| Malta | OEL TWA (mg/m ³) | 25 mg/m ³ |
| Malta | OEL TWA (ppm) | 10 ppm |

| | |
|------------------------------------|--|
| On contact with humidity, releases | : Acetic acid |
| Additional information | : Decomposes on exposure to water (moisture) |

8.2. Exposure controls

| | |
|--------------------------|--|
| Hand protection | : Wear suitable gloves. (EN 374). Protective gloves made of rubber. Nitrile rubber. Butyl rubber. Latex. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. |
| Eye protection | : Chemical goggles or safety glasses. |
| Skin and body protection | : Wear suitable protective clothing. (DIN EN 13034). |
| Respiratory protection | : Not necessary with sufficient ventilation. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Appearance | : Paste |
| Colour | : Red. Brown. |
| Odour | : Characteristic |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |

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| | |
|----------------------------------|--|
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 151 °C |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.3 g/cm ³ |
| Solubility | : Water: Not miscible |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Product is not explosive (EEC A.14). |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

None known

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

In case of fire: Carbon monoxide. Carbon dioxide. On contact with humidity, releases: Acetic acid.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|--|--|
| Acute toxicity | : Not classified Based on available data, the classification criteria are not met |
| Skin corrosion/irritation | : Not classified Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified Based on available data, the classification criteria are not met |
| Specific target organ toxicity (single exposure) | : Not classified Based on available data, the classification criteria are not met |
| Specific target organ toxicity (repeated exposure) | : Not classified Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified Based on available data, the classification criteria are not met |

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Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

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| | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

12.3. Bioaccumulative potential

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| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

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PBT: not relevant - no registration required

vPvB: not relevant - no registration required

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-----------------------------------|--|
| Regional legislation (waste) | : Dispose in a safe manner in accordance with local/national regulations. |
| Waste treatment methods | : Dispose of this material and its container at hazardous or special waste collection point. Do not empty into drains. |
| Waste disposal recommendations | : Empty the packaging completely prior to disposal. When totally empty, containers are recyclable like any other packing. |
| European List of Waste (LoW) code | : 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 04 00 - wastes from MFSU of adhesives and sealants (including waterproofing products) 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09 |

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

| | |
|-------------------------------|---|
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available. |

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Abbreviations and acronyms : RID - International Rule for Transport of Dangerous Substances by Railway. ICAO - International Civil Aviation Organization. ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road. IMDG - International Maritime Code for Dangerous Goods. IATA - International Air Transport Association. GHS - Globally Harmonised System. CAS - Chemical Abstracts Service. VOC - Volatile organic compounds. LD50/LC50 - Lethal Dose/Lethal Concentration, 50 percent.

Full text of H- and EUH-phrases:

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1C |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| EUH210 | Safety data sheet available on request |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.