

DIRKO HTSafety Data Sheet

according to Regulation (EU) No. 2015/830





Version: 3.2

Das Original

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
	Lorinani Hammanologio and Formologio aci ominologio aci		(German/English)

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

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
Triacetoxyethylsilane	(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 EUH014
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 EUH014

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Name	Product identifier	Specific concentration limits according Expert judgment
Triacetoxyethylsilane	(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 : Carbon dioxide. Carbon monoxide.

fire

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/m³)	5 mg/m³
United Kingdom	WEL STEL (mg/m³)	10 mg/m³
Ireland	Local name	Iron oxide, fume (as Fe)
Ireland	OEL (8 hours ref) (mg/m³)	5 mg/m³
Ireland	OEL (15 min ref) (mg/m³)	10 mg/m³
Silicon dioxide (-)		
United Kingdom	Local name	Silica, amorphous
United Kingdom	WEL TWA (mg/m³)	6 mg/m³ inhalable dust 2.4 mg/m³ respirable
Ireland	Local name	Silica, amorphous
Ireland	OEL (8 hours ref) (mg/m³)	6 mg/m³ inhalable dust 2.4 mg/m³ respirable

Exposure limit values for the other components

Acetic acid % (64-19-7)		
EU	IOELV TWA (mg/m³)	25 mg/m³
EU	IOELV TWA (ppm)	10 ppm
EU	IOELV STEL (mg/m³)	50 mg/m³
EU	IOELV STEL (ppm)	20 ppm
Ireland	Local name	Acetic acid
Ireland	OEL (8 hours ref) (mg/m³)	25 mg/m³
Ireland	OEL (8 hours ref) (ppm)	10 ppm
Ireland	OEL (15 min ref) (mg/m ³)	50 mg/m³
Ireland	OEL (15 min ref) (ppm)	20 ppm
Ireland	Notes (IE)	IOELV
Malta	Local name	Acetic acid
Malta	OEL TWA (mg/m³)	25 mg/m³
Malta	OEL TWA (ppm)	10 ppm
Malta	OEL (15 min ref) (mg/m³)	50 mg/m³
Malta	OEL (15 min ref) (ppm)	20 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

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Vapour pressure

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Relative vapour density at 20 °C

Relative evaporation rate (butylacetate=1) No data available Melting point No data available Freezing point No data available **Boiling point** No data available > 151 °C Flash point Auto-ignition temperature Not applicable Decomposition temperature No data available Flammability (solid, gas) Not applicable

Relative density : No data available
Density : 1.3 g/cm³

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).

No data available

No data available

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)

Based on available data, the classification criteria are not met

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Not classified

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Aspiration hazard : Not classified

Based on available data, the classification criteria are not met : Based on available data, the classification criteria are not met.

Potential adverse human health effects and

symptoms

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

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14.6.3. Air transport

No additional information available

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.

Changes compared to the previous version

: Updated: Revision date

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Biological concentration factor
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

At- T 4 (O1)	Acute toxicity (oral), Category 4
Acute Tox. 4 (Oral)	
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
EUH014	Reacts violently with water
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.

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