DIRKO™ HT Grey

Safety Data Sheet

according to Work Health and Safety Regulations 2011

Date of issue: 12/02/2024 Revision date: 20/08/2026 Version/Replaced version: 3.0/2.0

Section 1: Identification

1.1. Product identifier

Product form : Mixture

Product name : DIRKO™ HT Grey

1.2. Other means of identification

Product code : 036.164 (70 ml), 610.023 (310 ml)

1.3. Recommended use of the chemical and restrictions on use

Intended for general public

Recommended use of the substance/mixture : Sealants

Restricted use of the substance/mixture : Quartz (free silica; crystalline silicon dioxide): Abrasive blasting at a concentration of greater than 1%

1.4. Details of manufacturer or importer

Manufacturer
ElringKlinger AG
Max-Eyth-Straße 2
72581 Dettingen/Erms - Germany
T +49 (0)7123 724 799
det.iam.sdb@elringklinger.com

Supplier

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

1.5. Emergency phone number

24 h emergency telephone number : +1 872 5888271 (EKA)

Country	Organisation/Company	Address	Emergency telephone number
Australia	Poisons Information Hotline	-	13 11 26

Section 2: Hazard(s) identification

2.1. Classification of the hazardous chemical

GHS Classification according to WHS Regulations

Carcinogenicity, Category 1A H350

Specific target organ toxicity - Repeated exposure, Category 1 H372

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

May cause cancer. Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements, including precautionary statements

GHS Labelling according to WHS Regulations

Hazard pictograms (GHS) :

GHS07
Exclamation mark

GHS08
Health hazard

Signal word (GHS) : Danger

Hazard statements (GHS) : H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/vapours/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, eye protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P405 - Store locked up.

P501 - Dispose of contents/container to an authorized waste collection point.

2.3. Other hazards

Substances formed under the conditions of use:

Name	Product identifier	%	Classification according to WHS Regulations
2-Pentanone, oxime	(CAS No) 623-40-5	≤ 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 STOT RE 2, H373
Ethanol, ethyl alcohol	(CAS No) 64-17-5	≤ 1	Flam. Liq. 2, H225 Eye Irrit. 2, H319

Section 3: Composition and information on ingredients, in accordance with Schedule 8

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to WHS Regulations
Quartz	(CAS No) 14808-60-7	20 - < 30	Carc. 1A, H350 STOT RE 1, H372
Silica, amorphous	(CAS No) 112945-52-5	5 - < 10	Not classified
2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime	(CAS No) 58190-62-8	1 - < 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
2-Pentanone, O,O',O''-(methylsilylidyne)trioxime	(CAS No) 37859-55-5	1 - < 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Titanium dioxide	(CAS No) 13463-67-7	1 - < 5	Carc. 2, H351
3-aminopropyltriethoxysilane	(CAS No) 919-30-2	0.1 - < 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317
Octamethylcyclotetrasiloxane	(CAS No) 556-67-2	0.01 - < 0.079	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 1, H410 (M=10)

Full text of H-phrases: see section 16

Section 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water.

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.

First-aid measures after ingestion : Rinse mouth. Drink water as a precaution. Do NOT induce vomiting.

4.2. Symptoms caused by exposure

Symptoms/injuries : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

4.3. Medical attention and special treatment

Treat symptomatically.

Section 5: Firefighting measures

5.1. Suitable extinguishing equipment

Suitable extinguishing media : Use extinguishing agents that suit the environment. 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. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Silicon oxides.

5.3. Special protective equipment and precautions for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. 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. Do not breathe dust, vapours. Stop leak if safe to do so. If spilled, may cause the floor to be slippery.

Emergency procedures : Evacuate unnecessary personnel.

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: " Exposure controls and personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Keep in suitable, closed containers for disposal. Dispose of in accordance with relevant local regulations.

Section 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Avoid breathing dust, vapours, spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Protect from heat and direct sunlight. Store locked up.

Prohibitions on mixed storage : Keep away from food, drink and animal feedingstuffs.

Section 8: Exposure controls and personal protection

8.1. Exposure control measures

Quartz (14808-60-7)		
Australia	Local name	Quartz (respirable dust)
Australia	TWA (mg/m³)	0.05 mg/m³
Australia	Notes	e, f
ACGIH	Local name	SILICA, CRYSTALLINE - α-QUARTZ
ACGIH	TLV-TWA (mg/m³)	0.025 mg/m³
ACGIH	Remark (ACGIH)	A2

Titanium dioxide (13463-67-7)		
Australia	Local name	Titanium dioxide
Australia	TWA (mg/m³)	10 mg/m³
Australia	Notes	a
ACGIH	Local name	Titanium dioxide
ACGIH	TLV-TWA (mg/m³)	0.2 mg/m³ (respirable particulate matter; nanoscale particles) 2.5 mg/m³ (respirable particulate matter; fine-scale particles)
ACGIH	Remark (ACGIH)	A3

Ethanol (64-17-5)		
Australia	Local name	Ethyl alcohol
Australia	HCIS TWA (mg/m³)	1880 mg/m³ (until 30/11/2026)
Australia	HCIS TWA (ppm)	1000 ppm (until 30/11/2026)
Australia	TWA (mg/m³)	380 mg/m³ (from 01/12/2026)
Australia	TWA (ppm)	200 ppm (from 01/12/2026)
Australia	STEL (mg/m³)	1500 mg/m³ (from 01/12/2026)
Australia	STEL (ppm)	800 ppm (from 01/12/2026)
ACGIH	Local name	Ethanol
ACGIH	TLV-STEL (mg/m³)	1880 mg/m³
ACGIH	TLV-STEL (ppm)	1000 ppm
ACGIH	Remark (ACGIH)	A3

Silica, amorphous (112945-52-5)		
Australia	Local name	Silica - Amorphous / Fumed silica (respirable dust)
Australia	TWA (mg/m³)	2 mg/m³
Australia	Notes	a

8.2. Biological monitoring

No additional information available

8.3. Control Banding

No additional information available

8.4. Engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize vapour concentrations.

8.5. Individual protection measures, for example personal protective equipment (PPE)

Eye and face protection : Chemical goggles or safety glasses (AS/NZS 1337 or equivalent).

Skin and body protection : Wear suitable protective clothing.

Wear suitable gloves (AS/NZS 2161 or equivalent). Short-term contact: nitrile/neoprene, ≥ 0.2 mm. Prolonged or repeated contact: nitrile, ≥ 1.25 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Respiratory protection with filter type ABEK (AS/NZS 1716 or equivalent).

Thermal hazards : Not required for normal conditions of use.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid. Paste.

Colour : Grey

Odour : No data available

Melting point/freezing point : No data available

Boiling point or initial boiling point and boiling range : No data available

Flammability : No data available

Lower and upper explosion limit/flammability limit : Not applicable

Flash point : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : No data available

pH : Not applicable

Kinematic viscosity : Not applicable

Solubility : Water: practically insoluble
Acetone, Alcohol: slightly soluble
Aliphatic/aromatic hydrocarbons: dispersible
Chlorinated solvents: dispersible

Partition coefficient n-octanol/water (log value) : Not applicable

Vapour pressure : No data available

Density and/or relative density : ~ 1.25 kg/dm³ (20 °C)

Relative vapour density : Not applicable

Particle characteristics : No data available

9.2. Other information

Explosive properties : None

Oxidising properties : None

Section 10: Stability and reactivity

10.1. Reactivity

Vulcanizes at room temperature and on contact with humidity.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

Oxidizing agents. Water.

10.6. Hazardous decomposition products

In case of fire: Carbon dioxide. Carbon monoxide. Toxic gases and vapours. Silicon oxides.

Section 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity : Not classified
Based on available data, the classification criteria are not met

2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime (58190-62-8)	
LD50 oral rat	1000 - 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)	
LD50 oral rat	1234 mg/kg
LD50 dermal rat	> 2000 mg/kg

3-aminopropyltriethoxysilane (919-30-2)	
LD50 oral rat	1490 mg/kg
LD50 dermal rabbit	4076 mg/kg
LC50 inhalation rat (Vapours)	> 145 mg/m³/6 h

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 oral rat	> 4800 mg/kg
LD50 dermal rat	> 2375 mg/kg
LC50 inhalation rat (Dust/Mist)	36 mg/l/4 h

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 : May cause cancer.

Quartz (14808-60-7)	
IARC	Group 1: Carcinogenic to humans.

Titanium dioxide (13463-67-7)	
IARC	Group 2B: Possibly carcinogenic to humans.

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific Target Organ Toxicity (STOT) — single exposure : Not classified
Based on available data, the classification criteria are not met

Specific Target Organ Toxicity (STOT) — repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

11.2. Information on other hazards

Information on possible routes of exposure : Oral, dermal, inhalative

Early onset symptoms related to exposure : No additional information available

Delayed health effects from exposure : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Exposure levels and health effects : No additional information available

Interactive effects : None known.

Mixtures of chemicals : No additional information available

Other information : No additional information available

Section 12: Ecological information

12.1. Ecotoxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

The maximum concentration of octamethylcyclotetrasiloxane (556-67-2) that can leach from the product is below the established safety level (< 0.0079 mg/l) for aquatic organisms.

2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime (58190-62-8)	
LC50 fish	> 100 mg/l 96 h, Oncorhynchus mykiss
EC50 daphnia	> 100 mg/l 48 h, Daphnia magna
ErC50 algae	88 mg/l 72 h, Raphidocelis subcapitata
NOEC algae	32 mg/l 72 h, Raphidocelis subcapitata

2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)	
LC50 fish	> 100 mg/l 96 h, Oncorhynchus mykiss
EC50 daphnia	> 100 mg/l 48 h, Daphnia magna
ErC50 algae	88 mg/l 72 h, Raphidocelis subcapitata
NOEC algae	32 mg/l 72 h, Raphidocelis subcapitata

3-aminopropyltriethoxysilane (919-30-2)	
LC50 fish	> 934 mg/l 96 h, Danio rerio
EC50 daphnia	331 mg/l 48 h, Daphnia magna
EC50 algae	> 1000 mg/l 72 h, Desmodesmus subspicatus
NOEC daphnia	> 11.9 mg/l 21 d, Daphnia magna
NOEC algae	1.3 mg/l 72 h, Desmodesmus subspicatus

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 fish	> 0.022 mg/l 96 h, Oncorhynchus mykiss
EC50 daphnia	> 0.015 mg/l 48 h, Daphnia magna
EC50 algae	> 0.022 mg/l 96 h, Raphidocelis subcapitata
NOEC fish	≥ 0.0044 mg/l 93 d, Oncorhynchus mykiss
NOEC daphnia	≥ 0.015 mg/l 21 d, Daphnia magna
NOEC algae	< 0.022 mg/l 96 h, Raphidocelis subcapitata

12.2. Persistence and degradability

2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime (58190-62-8)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1 %, 28 d (OECD 301 B)

2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1 %, 28 d (OECD 301 B)

3-aminopropyltriethoxysilane (919-30-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	67 %, 28 d (OECD 301 A)

Octamethylcyclotetrasiloxane (556-67-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	3.7 %, 29 d (OECD 310)

12.3. Bioaccumulative potential

2-Pentanone, O,O',O''-(ethenylsilylidyne)trioxime (58190-62-8)	
Bioconcentration factor (BCF)	69.21 l/kg

2-Pentanone, O,O',O''-(methylsilylidyne)trioxime (37859-55-5)	
Bioconcentration factor (BCF)	103.3 l/kg

3-aminopropyltriethoxysilane (919-30-2)	
Bioconcentration factor (BCF)	3.4 (OECD 305 C)

Octamethylcyclotetrasiloxane (556-67-2)	
Bioconcentration factor (BCF)	12400 l/kg (EPA OTS 797.1520)
Partition coefficient n-octanol/water (Log Pow)	6.98 (21.7 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

Section 13: Disposal considerations

13.1. Disposal 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.

Section 14: Transport information

In accordance ADG / IMDG / IATA

14.1. UN number

UN-No. (ADG)	:	Not applicable
UN-No. (IMDG)	:	Not applicable
UN-No. (IATA)	:	Not applicable

14.2. Proper Shipping Name or Technical Name

Proper Shipping Name (ADG)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable

14.3. Transport hazard class

ADG

Transport hazard class(es) (ADG)	:	Not applicable

IMDG

Transport hazard class(es) (IMDG)	:	Not applicable

IATA

Transport hazard class(es) (IATA)	:	Not applicable

14.4. Packing group number

Packing group (ADG)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Packing group (IATA)	:	Not applicable

14.5. Environmental hazards for transport purposes

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

14.6. Special precautions for user

Transport by road and rail (ADG)

Not applicable

Transport by sea (IMDG)

Not applicable

Air transport (IATA)

Not applicable

14.7. Additional information

No additional information available

14.8. Hazchem or Emergency Action Code

Not applicable

Section 15: Regulatory information

15.1. Safety, health and environmental regulations

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

Contains no substance(s) subject to the Rotterdam Convention.

Stockholm Convention on Persistent Organic Pollutants

Contains no substance(s) subject to the Stockholm Convention.

Montreal Protocol on Substances that Deplete the Ozone Layer

Contains no substance(s) subject to the Montreal Protocol.

Work Health and Safety Regulations 2011

Contains restricted hazardous chemicals according to Schedule 10, table 10.3 of the Work Health and Safety Regulations 2011:

Quartz (14808-60-7)	
Restricted hazardous chemical	Free silica (crystalline silicon dioxide)
Restricted use	For abrasive blasting at a concentration of greater than 1%

Section 16: Any other relevant information

Data sources	:	Work Health and Safety Regulations 2011 (as amended and in force); Model Work Health and Safety Regulations (as at 5 December 2025); Safe Work Australia, Model Code of Practice: Preparation of safety data sheets for hazardous chemicals (as at June 2023).
Date of preparation or review	:	20/08/2026
Changes compared to the previous version	:	Section 2.3 Secrion 3.2 Section 8.1

Key abbreviations or acronyms used:

ADG	Australian Code for the Transport of Dangerous Goods by Road & Rail
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	“International Maritime Dangerous Goods Code” for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
OECD	Organisation for Economic Cooperation and Development
WHS Regulations	Work Health and Safety Regulations 2011

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1B	Skin sensitisation, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

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.