

DIRKO™ Transparent

Safety Data Sheet according to UK REACH Date of issue: 01.10.2018

Revision date: 12.06.2023

Version/Replaced version: 3.0/2.1

SECTIO	ON 1: Identification of the subs	stance/mixture and of the company/undertaking
1.1.	Product identifier	
Product for	orm	: Mixture
Product n	ame	: DIRKO [™] Transparent
Product c	ode	: 216.910 (310 ml)
1.2.	Relevant identified uses of the subst	ance or mixture and uses advised against
1.2.1.	Relevant identified uses	
Intended	for general public	
Use of the	e substance/mixture	: Sealants
1.2.2.	Uses advised against	
No additio	onal information available	
1.3.	Details of the supplier of the safety d	ata sheet
ElringKlin Max-Eyth 72581 De T +49 (0)	0	Supplier
Elring Par Unit 2, De Earlsway Gateshea Tyne and NE11 TF Sales T +	erwent Court Team Valley Trading Estate Id Wear	

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

Country	Organisation/Company	Address	Emergency number
Germany	Giftinformationszentrum (GIZ-Nord) Universitätsmedizin Göttingen - Georg-August-Universität	Robert-Koch Straße 40 37075 Göttingen	+49 551 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP

Serious eye damage/eye irritation, Category 2 H319

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

Causes serious eye irritation. When the product hardens, small amounts of irritating vapors are released.

2.2. Label elements Labelling according to Regulation (EC) No 1272/2008 [CLP] Hazard pictograms (CLP) : Hazard pictograms (CLP) : Signal word (CLP) : Hazard statements (CLP) : Warning : Hazard statements (CLP) : Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P264 - Wash hands thoroughly after handling. P280 - Wear eye protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. **Other hazards**

Contains PBT/vPvB substances assessed in accordance with UK REACH Annex XIII: Octamethylcyclotetrasiloxane (556-67-2), Decamethylcyclopentasiloxane (541-02-6), Dodecamethylcyclohexasiloxane (540-97-6).

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Substances formed under the conditions of use:

Name	Product identifier	%	Classification according to GB CLP
Acetic acid	(CAS No) 64-19-7 (EC No) 200-580-7 (Index No) 607-002-00-6	< 3	Flam. Liq. 3, H226 Skin Corr. 1A, H314

SECTION 3: Composition/information on ingredients

Substances 3.1.

Not applicable

Mixtures 3.2.

Name	Product identifier	%	Classification according to GB CLP
Methylsilanetriyl triacetate	(CAS No) 4253-34-3 (EC No) 224-221-9	1 - < 3	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
Octamethylcyclotetrasiloxane (substance listed as REACH Candidate)	(CAS No) 556-67-2 (EC No) 209-136-7 (Index No) 014-018-00-1	0.25 - < 2.5	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 (M=10)
Decamethylcyclopentasiloxane (substance listed as REACH Candidate)	(CAS No) 541-02-6 (EC No) 208-764-9	0.1 - < 1	Not classified
Dodecamethylcyclohexasiloxane (substance listed as REACH Candidate)	(CAS No) 540-97-6 (EC No) 208-762-8	0.1 - < 1	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures 4.1. Description of 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 presen and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Drink water as a precaution. Do NOT induce vomiting.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/injuries after eye contact	: Causes serious eye irritation.
4.3. Indication of any immediate medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
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.
T.O. Oversiel because a state of the	
5.2. Special hazards arising from the su	ibstance or mixture
5.2. Special hazards arising from the su Hazardous decomposition products in case of fire	bstance or mixture : Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Silicon oxides.
Hazardous decomposition products in case of	
Hazardous decomposition products in case of fire	
Hazardous decomposition products in case of fire 5.3. Advice for firefighters	 Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Silicon oxides. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering
Hazardous decomposition products in case of fire 5.3. Advice for firefighters Firefighting instructions Protection during firefighting	 Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Silicon oxides. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Use a self-contained breathing apparatus and also a protective suit.
Hazardous decomposition products in case of fire 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release mea	 Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Silicon oxides. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Use a self-contained breathing apparatus and also a protective suit.

ccording to UK REACH			
6.1.1. For non-emergen	cy personnel		
Emergency procedures		: Evacuate unnecessary personnel.	
6.1.2. For emergency re	esponders		
Protective equipment			s required. In case of inadequate ventilation wear rmation refer to section 8: "Exposure controls/personal
6.2. Environmental pr	recautions		
Prevent entry to sewers and	public waters.		
6.3. Methods and mat	erial for containmer	nt and cleaning up	
Methods for cleaning up			example cloth). Soak up spills with inert solids, such as as possible. Keep in suitable, closed containers for ith relevant local regulations.
6.4. Reference to othe	er sections		
Exposure controls and perso	onal protection, see se	ection 8. Concerning disposal elimination	n after cleaning, see section 13.
SECTION 7: Handling	and storage		
7.1. Precautions for s	afe handling		
Precautions for safe handling	9	: Ensure good ventilation of the work si skin and eyes. Wear personal protect	tation. Avoid breathing vapours, spray. Avoid contact with live equipment.
Hygiene measures		other exposed areas with mild soap a leaving work. When using do not eat,	strial hygiene and safety procedures. Wash hands and and water before eating, drinking or smoking and when drink or smoke. Contaminated work clothing should not sh contaminated clothing before reuse.
7.2. Conditions for sa	fe storage, includin	g any incompatibilities	
Storage conditions		: Store in original container. Keep container. Reep container. Reep container. Reep container. Reep container.	ainer tightly closed. Store in a dry, cool and well-ventilated unlight.
Prohibitions on mixed storage	e	: Keep away from food, drink and anim	al feedingstuffs.
7.3. Specific end use(s)		
Sealants.			
	-	und must setters	
SECTION 8: Exposure		nai protection	
8.1. Control paramete	ers		
Acetic acid (64-19-7)	Lacelnemo		Apotio poid
United Kingdom United Kingdom	Local name WEL TWA (mg/	m ³)	Acetic acid 25 mg/m ³
United Kingdom	WEL TWA (mg/		10 ppm
United Kingdom	WEL STEL (mg	•	50 mg/m ³
United Kingdom	WEL STEL (ppr	,	20 ppm
		.,	
Methylsilanetriyl triacetat DNEL/DMEL (Workers)	ie (4253-34-3)		
Acute - local effects, inhala	tion	61 mg/m ³	
Long-term - local effects, in		31 mg/m ³	
DNEL/DMEL (General popu		o i ing/in	
Acute - local effects, inhala		61 mg/m³	
Long-term - local effects, in		31 mg/m ³	
PNEC (Sediment)			
PNEC sediment (freshwate	er)	4.8 mg/kg dwt	
PNEC sediment (marine wa	ater)	0.48 mg/kg dwt	
PNEC (Soil)			
PNEC soil		0.19 mg/kg dwt	
PNEC (STP)			
PNEC sewage treatment pl	lant	6.9 mg/l	
Octamethylcyclotetrasilo	xane (556-67-2)		
DNEL/DMEL (Workers)			
Long-term - systemic effect		73 mg/m³	
Long-term - local effects, in		73 mg/m³	
DNEL/DMEL (General popu	,		
Long-term - systemic effect		3.7 mg/kg bodyweight/day	
Long-term - systemic effect	ts, inhalation	13 mg/m³	
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Octamethylcyclotetrasiloxane (556-67-2)	
Long-term - local effects, inhalation	13 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.0015 mg/l
PNEC aqua (marine water)	0.00015 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3 mg/kg dwt
PNEC sediment (marine water)	0.3 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.84 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	41 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
Decamethylcyclopentasiloxane (541-02-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	97.3 mg/m ³
Long-term - local effects, inhalation	24.2 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	17.3 mg/m ³
Long-term - local effects, inhalation	4.3 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.0012 mg/l
PNEC aqua (marine water)	0.00012 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	11 mg/kg dwt
PNEC sediment (marine water)	1.1 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.54 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	16 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l
Dodecamethylcyclohexasiloxane (540-97-6)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	6.1 mg/m ³
Long-term - local effects, inhalation	1.22 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1.5 mg/m ³
Long-term - local effects, inhalation	0.3 mg/m ³
PNEC (Sediment)	
PNEC sediment (freshwater)	13.5 mg/kg dwt
PNEC sediment (marine water)	1.35 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	66.7 mg/kg food
8.2. Exposure controls	
Appropriate engineering controls	: Provide local exhaust or general room ventilation to minimize vapour concentrations.
Hand protection	: Wear suitable gloves (EN 374 or equivalent). Short-term contact: nitrile/neoprene, ≥ 0.2 mm.
	Prolonged or repeated contact: nitrile, \geq 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.
Eye protection	: Chemical goggles or safety glasses (EN 166).
Skin and body protection	: Wear suitable protective clothing (EN 14605, EN 13982).
Respiratory protection	 Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Respiratory protection with filter type ABEK (EN 14387).
Environmental exposure controls	: Avoid release to the environment.

SECTIO	ON 9: Physical and chemical properties	
	Information on basic physical and chemical properties	
Appearan		
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Odour	: Characteristic, vinegar
Odour threshold	: No data available
рН	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: > 150 °C (Afnor T 60103)
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: No data available
Density	: ~ 1.04 kg/dm³ (20 °C)
Solubility(ies) Partition coefficient: n-octanol/water	: Water: practically insoluble Acetone, Alcohol: insoluble Aliphatic/aromatic hydrocarbons: partially soluble Chlorinated solvents: partially soluble : No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: > 200 °C
Viscosity	: No data available
Explosive properties	: None
Oxidising properties	: None
9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	ty
10.1. Reactivity	
Vulcanizes at room temperature and on contact	ct with humidity.
10.2. Chemical stability	

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

Possibility of hazardous reactions 10.3.

None under normal use.

Conditions to avoid 10.4.

High temperature.

10.5. Incompatible materials

Oxidizing agents. Water.

Hazardous decomposition products 10.6.

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

SECTION 11: Toxicological information

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11.1.
         Information on toxicological effects
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Acute toxicity
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Not classified :

Based on available data, the classification criteria are not met

Methylsilanetriyl triacetate (4253-34-3)	
LD50 oral rat	1600 mg/kg
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
Dodecamethylcyclohexasiloxane (540-97-6)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Decamethylcyclopentasiloxane (541-02-6)	
	> 5000 mm//m
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	8.67 mg/l/4 h
Skin corrosion/irritation	: The product is not considered to be irritating to the skin (Test results with a similar product).
Serious eye damage/irritation	: Causes serious eye irritation (Test results with a similar product).
Respiratory or skin sensitisation	: Not classified
	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Not classified
5 7	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
	Based on available data, the classification criteria are not met
Poproductivo toxicitu	: Not classified
Reproductive toxicity	
×	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	: Not classified
exposure)	Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
	Based on available data, the classification criteria are not met
Potential adverse human health effects and	: Endocrine disruption for human health: The substance/mixture has no endocrine disrupting
ymptoms	properties.
SECTION 12: Ecological information	1
2.1. Toxicity	
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 (based on
	product is below the established safety level (< 0.0079 mg/l) for aquatic organisms (based on partition coefficient, test results with a similar product).
Methylsilanetriyl triacetate (4253-34-3)	
Methylsilanetriyl triacetate (4253-34-3) LC50 fish	partition coefficient, test results with a similar product).
	 partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio
LC50 fish EC50 crustacean	 > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna
LC50 fish EC50 crustacean EC50 algae	 > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia	 partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae	 > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2)	 partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 96 h, Oncorhynchus mykiss
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 500 mg/l 74 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 500 mg/l 74 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae NOEC fish	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata ≥ 0.0044 mg/l 93 d, Oncorhynchus mykiss
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae NOEC fish NOEC daphnia NOEC daphnia	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata ≥ 0.0044 mg/l 93 d, Oncorhynchus mykiss ≥ 0.015 mg/l 21 d, Daphnia magna < 0.022 mg/l 96 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae NOEC fish NOEC daphnia NOEC daphnia NOEC algae Dodecamethylcyclohexasiloxane (540-97-6)	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata ≥ 0.0044 mg/l 93 d, Oncorhynchus mykiss ≥ 0.015 mg/l 21 d, Daphnia magna < 0.022 mg/l 96 h, Raphidocelis subcapitata
LC50 fish EC50 crustacean EC50 algae NOEC daphnia NOEC algae Octamethylcyclotetrasiloxane (556-67-2) LC50 fish EC50 daphnia EC50 algae NOEC fish NOEC daphnia NOEC daphnia NOEC algae Dodecamethylcyclohexasiloxane (540-97-6) EC50 algae	partition coefficient, test results with a similar product). > 500 mg/L 96 h, Danio rerio > 500 mg/L 48 h, Daphnia magna > 500 mg/L 72 h, Raphidocelis subcapitata ≥ 100 mg/l 21 d, Daphnia magna ≥ 500 mg/l 72 h, Raphidocelis subcapitata ≥ 500 mg/l 72 h, Raphidocelis subcapitata > 0.022 mg/l 96 h, Oncorhynchus mykiss > 0.015 mg/l 48 h, Daphnia magna > 0.022 mg/l 96 h, Raphidocelis subcapitata ≥ 0.0044 mg/l 93 d, Oncorhynchus mykiss ≥ 0.015 mg/l 21 d, Daphnia magna < 0.022 mg/l 96 h, Raphidocelis subcapitata
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Methylsilanetriyl triacetate (4253-34-3)		
Persistence and degradability	Readily biodegradable.	
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Methylsilanetriyl triacetate (4253-34-3)	
Biodegradation	74 %, 21 d (EU Method C.4-A)
Octamethylcyclotetrasiloxane (556-67-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	3.7 %, 29 d (OECD 310)
Dodecamethylcyclohexasiloxane (540-97-6)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	4.47 %, 28 d (OECD 310)
<u> </u>	
Decamethylcyclopentasiloxane (541-02-6)	Net readily biodegradely
Persistence and degradability Biodegradation	Not readily biodegradable. 0.14 %, 28 d (OECD 310)
	0.14 %, 28 d (OECD 310)
12.3. Bioaccumulative potential	
Octamethylcyclotetrasiloxane (556-67-2)	
Bioconcentration factor (BCF REACH)	12400 l/kg (EPA OTS 797.1520)
Partition coefficient n-octanol/water (Log Pow)	6.98 (21.7 °C)
Dodecamethylcyclohexasiloxane (540-97-6)	
Bioconcentration factor (BCF REACH)	1160 (OECD 305)
Partition coefficient n-octanol/water (Log Pow)	8.87
Decamethylcyclopentasiloxane (541-02-6)	
Bioconcentration factor (BCF REACH)	7060 (OECD 305)
Partition coefficient n-octanol/water (Log Pow)	8.023
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessmer	nt
	ordance with UK REACH Annex XIII: Octamethylcyclotetrasiloxane (556-67-2),
Dodecamethylcyclohexasiloxane (540-97-6), Dec	
12.6. Other adverse effects	
Endocrine disruption for the environment	: The substance/mixture has no endocrine disrupting properties.
SECTION 13: Disposal consideration	s
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.
Waste code	: The valid LoW waste code numbers are source related. The manufacturer is therefore unable to specify LoW waste codes for the articles or products used in the various sectors. The LoW codes listed are intended as a recommendation for users.
SECTION 14: Transport information	
SECTION 14: Transport information	
In accordance with ADR / IMDG / IATA	
14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (ADIC) Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
1 11 3 ()	
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
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according to UK REACH	

IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: 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	

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

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

Contains no substance(s) listed on UK REACH Annex XIV (Authorisation List).

Contains substance(s) listed on the UK REACH Candidate List: Octamethylcyclotetrasiloxane (556-67-2).

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. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 No. 720 as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.
Changes compared to the previous version	: Section 3.2 Section 8.1 Section 11 Section 12

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
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)
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier

DIRKO™ Transparent

Safety Data Sheet

vPvB	Very Persistent and Very Bioaccumulative
Full text of H- and EUH-phrases:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
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.