Safety Data Sheet

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

1.1 Product identifier

Product name: **Korasilon M5**

Other identification:

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

Surface treatment, assembling aid, release agent, damperfluid

1.3 Details of the supplier of the safety data sheet

SwanTek
Mintsfeet Road South, Kendal, LA9 6ND, UK
Tel: +44 (0)1539 722247 Email: service@swantek.com Web: www.swantek.com

1.4 Emergency telephone number

As per section 1.3

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Not classified as hazardous under CLP.
Classification procedure: calculation method.

2.2 Label elements

Hazard pictograms: (none)
(none)
(none)
(none)

Signal word: (none)

Hazard statements: None

Precautionary statements: None

Other label elements: EUH210 Safety data sheet available on request.

2.3 Other hazards

No information available.

Section 3: Composition / information on ingredients

3.1 Substances

Substance name: Polydimethylsiloxane
Purity: ≥ 90 - < 100 % [mass]

Hazardous impurities
Dodecamethylcyclohexasiloxane ; REACH registration No. : 01-2119517435-42 ; EC No. : 208-762-8; CAS No. : 540-97-6
Weight fraction : ≥ 1 - < 3 %
Classification 1272/2008 [CLP] : None

Decamethylcyclopentasiloxane ; REACH registration No. : 01-2119511367-43 ; EC No. : 208-764-9; CAS No. : 541-02-6
Weight fraction : ≥ 1 - < 3 %
Classification 1272/2008 [CLP] : None

Octamethylcyclotetrasiloxane ; REACH registration No. : 01-2119529238-36 ; EC No. : 209-136-7; CAS No. : 556-67-2
Weight fraction : < 1 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Repr. 2 ; H361f Aquatic Chronic 4 ; H413

This product contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH

Dodecamethylcyclohexasiloxane ; REACH registration No. : 01-2119517435-42 ; EC No. : 208-762-8; CAS No. : 540-97-6
Decamethylcyclopentasiloxane ; REACH registration No. : 01-2119511367-43 ; EC No. : 208-764-9; CAS No. : 541-02-6
Octamethylcyclotetrasiloxane ; REACH registration No. : 01-2119529238-36 ; EC No. : 209-136-7; CAS No. : 556-67-2

3.2 Mixtures

Section 4: First aid measures

4.1 Description of first aid measures

General: Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice. Treat symptomatically.

Inhalation: Provide fresh air.

Ingestion: Do NOT induce vomiting. Rinse mouth thoroughly with water.

Skin: After contact with skin, wash immediately with plenty of water and soap.

Eye: Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

4.2 Most important symptoms and effects, both acute and delayed

General: No information available.

Inhalation:

Ingestion:

Skin:

Eye:

4.3 Indication of any immediate medical attention and special treatment needed

None

Section 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide (CO2) alcohol resistant foam Water spray jet Extinguishing powder Sand. Do not use full water jet

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

In case of fire toxic gases may be formed. Wear a self-contained breathing apparatus and chemical protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Take the precautions customary when handling chemicals. Use personal protection equipment. Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up

Take up mechanically. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4 Reference to other sections

None

Section 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Use only in well-ventilated areas. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Store only in original container. Protect containers against damage.

7.3 Specific end use(s)

Section 8: Exposure controls / personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

Eye protection: Eye glasses with side protection
Hand protection: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Suitable material : Butyl caoutchouc (butyl rubber) NBR (Nitrile rubber)
Breakthrough time (maximum wearing time) : 480 minutes. Check leak tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
Usually no personal respirative protection necessary.
Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Note: This information represents typical data and is not a specification.

Physical state	Liquid
Colour	Different according to colour
Odour	Odourless
Flash point	> 120°C
Ignition temperature	approx. 350°C
Density	approx. 0.92 g/cm³
Solubility in water	Insoluble
Kinematic viscosity @ 25°C	approx. 5 cSt

9.2 Other information

No data available

Section 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150°C through oxidation.

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute effects
Acute oral toxicity
Parameter : LD50
Exposure route : Oral
Species : Rat
Effective dose : > 5000 mg/kg
Parameter : LD50 (Dodecamethylcyclohexasiloxane ; CAS No. : 540-97-6)
Exposure route : Oral
Species : Rat

Effective dose : > 2000 mg/kg
Parameter : LD50 (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Exposure route : Oral
Species : Rat
Effective dose : > 5000 mg/kg
Parameter : LD50 (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Oral
Species : Rat
Effective dose : 4800 mg/kg
Method : OECD 401
By analogy.
Acute dermal toxicity
Parameter : LD50
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (Dodecamethylcyclohexasiloxane ; CAS No. : 540-97-6)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Method : OECD 402
Parameter : LD50 (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Dermal
Species : Rat
Effective dose : > 2400 mg/kg
Method : OECD 402
By analogy.
Acute inhalation toxicity
Parameter : LC50 (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 36 mg/l
Exposure time : 4 h
Method : OECD 403
The product has not been tested.

Specific symptoms in animal studies: The product has not been tested.

Irritant and corrosive effects
Primary irritation to the skin
Parameter : Primary irritation to the skin
Species : Rabbit
Exposure time : 24 h
Result : Not irritating.
By analogy.
Irritation to eyes
Parameter : Irritation to eyes
Species : Rabbit
Result : Not irritating.
By analogy.
Irritation to respiratory tract
The product has not been tested.
Sensitisation
In case of skin contact
Parameter : Skin sensitisation
Species : Guinea pig
Result : Not sensitising.

Method : OECD 406
By analogy.
In case of inhalation
The product has not been tested.

Repeated dose toxicity (subacute, subchronic, chronic)
By analogy.
Subacute oral toxicity
Parameter : NOAEL(C)
Exposure route : Oral
Species : Rat
Effective dose : >= 1000 mg/kg
Parameter : NOAEL(C) (Dodecamethylcyclohexasiloxane ; CAS No. : 540-97-6)
Exposure route : Oral
Species : Rat
Effective dose : 1000 mg/kg
Parameter : NOAEL(C) (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Exposure route : Oral
Species : Rat
Effective dose : => 1000 mg/kg
Exposure time : 90 d
Subacute dermal toxicity
Parameter : NOAEL(C) (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Exposure route : Dermal
Species : Rat
Effective dose : => 1600 mg/kg
Exposure time : 28 d
Method : OECD 410
Parameter : NOAEL(C) (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Dermal
Species : Rabbit
Effective dose : > 1 mg/kg
Exposure time : 21 d
Method : OECD 410
Subacute inhalation toxicity
Parameter : NOAEL(C) (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Exposure route : Inhalation
Species : Rat
Effective dose : >= 160 ppm
Exposure time : 720 d
Parameter : NOAEC (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 150 mg/kg
Exposure time : 730 d

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
The product has not been tested.
Carcinogenicity
Parameter : NOAEL(C)
Exposure route : Oral
Species : Rat
Effective dose : >= 1000 mg/kg
Parameter : Carcinogenicity (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Test result : Negative.
Parameter : NOAEL(C) (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 150 mg/kg
Exposure time : 730 d
Method : OECD 453

Parameter : NOAEL(C) (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Inhalation
Species : Rat
Effective dose : > 700 mg/kg
Exposure time : 730 d
Method : OECD 453
By analogy.
Germ cell mutagenicity
The product has not been tested.
In vitro mutagenicity
Parameter : In vitro mutagenicity (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Test result : Ames test negative.
Parameter : In vitro mutagenicity (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Species : Salmonella typhimurium
Test result : Negative.
Method : OECD 471 (Ames test)
Parameter : In vitro mutagenicity (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Species : Mouse
Test result : Negative.
Method : OECD 476
In vivo mutagenicity
Parameter : In-vivo Unscheduled DNA Synthesis (UDS) (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Species : Rat
Test result : Negative.
Reproductive toxicity
The product has not been tested.
Adverse effects on developmental toxicity
Parameter : NOAEL(C)
Exposure route : Oral
Species : Rabbit
Effective dose : >= 1000 mg/kg
By analogy.
Developmental toxicity/teratogenicity
Two generation reproduction toxicity test
Parameter : Two generation reproduction toxicity test (Decamethylcyclopentasiloxane ; CAS No. : 541-02-6)
Species : Rat
Test result : Negative.
Parameter : NOAEL(C) (Octamethylcyclotetrasiloxane ; CAS No. : 556-67-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 300 mg/kg
Method : OECD 416

STOT-single exposure: The product has not been tested.

STOT-repeated exposure: The product has not been tested.

Aspiration hazard: The product has not been tested.

Toxicokinetics, metabolism and distribution: The product has not been tested.

Section 12: Ecological information

12.1 Toxicity

Aquatic toxicity
Acute (short-term) fish toxicity
Parameter : LC0
Species : Leuciscus idus (golden orfe)
Evaluation parameter : Acute (short-term) fish toxicity

Effective dose : 200 mg/l
Exposure time : 96 h
By analogy.
Chronic (long-term) fish toxicity
Parameter : NOEC
Species : Oncorhynchus mykiss (Rainbow trout)
Effective dose : > 10000 mg/kg
Exposure time : 28 d
By analogy.
Acute (short-term) daphnia toxicity
Parameter : EC0
Species : Daphnia magna (Big water flea)
Evaluation parameter : Acute (short-term) daphnia toxicity
Effective dose : > 0,0001 mg/l
Exposure time : 48 h
By analogy.
Chronic (long-term) daphnia toxicity
The product has not been tested.
Acute (short-term) algae toxicity
Parameter : IC50
Species : Skeletonema costatum
Effective dose : > 100000 mg/l
Exposure time : 72 h
By analogy.
Chronic (long-term) algae toxicity
The product has not been tested.
Bacteria toxicity
The product has not been tested.

Terrestrial toxicity
The product has not been tested.

Effects in sewage plants
Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

12.2 Persistence and degradability

Abiotic degradation
The product can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.
Biodegradation
Not readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

The product has not been tested.

12.4 Mobility in soil

The product has not been tested.

12.5 Results of PBT and vPvB assessment

Octamethylcyclotetrasiloxane (D4) meets the current EU REACh Annex XIII criteria for PBT and vPvB and has been added to the candidate list for Substances of very high concern (SVHC). However, D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by naturally occurring reactions in the atmosphere. Any D4 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms. Decamethylcyclopentasiloxane (D5) meets the current EU REACH Annex XIII criteria for vPvB and has been added to the candidate list for Substances of very high concern (SVHC). However, D5 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by naturally occurring reactions in the atmosphere. Any D5 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms. Dodecamethylcyclohexasiloxane (D6) meets the current EU REACH Annex XIII criteria for vPvB and has been added to the candidate list for Substances of very high concern (SVHC). However, D6 does not behave similarly to known PBT/vPvB

substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by naturally occurring reactions in the atmosphere. Any D6 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms

12.6 Other adverse effects

No data available

Section 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Consult the appropriate local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Handle contaminated packages in the same way as the substance itself.

Section 14: Transport information

General

Not dangerous in sense of transport regulations.

14.1 UN Number

14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Section 15: Regulatory information

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

EU legislation
Authorisations and/or restrictions on use: Use restriction according to REACH annex XVII, no. : 70

National regulations
Technische Anleitung Luft (TA-Luft)
Weight fraction (Number 5.2.5. II) : 0,1 - 1 %
Sum organic substances class III : 85 - 100 %
Water hazard class (WGK) Class : 1 (Slightly hazardous to water) Classification according to AwSV
Additional information: Substance/product listed in the following inventories: TSCA REACH DSL/NDSL ENCS (Class 1 and 2) AICS NZIoC KECL IECSC

15.2 Chemical safety assessment

No information available.

Section 16: Other information

Abbreviations and acronyms:
REACH - Registration, Evaluation, Authorisation of Chemicals
GHS - Globally Hamonised System of Classification and Labeling
CLP - Classification, Labeling and Packaging of Substances and Mixtures
CAS - Chemical Abstract Service
TWA - Time Weighted Average
DNEL/DMEL - Derived No Effect Level
PNEC - Predicted No Effect Concentration
STP - Sewage Treatment Plant
TRGS - Technical Rules for Hazardous Substances (German Regulations)
STEL - Short-term Exposure Limit
TLV - threshold limit value
AGW - Occupational threshold limit value

RCP - Reciprocal Calculation Procedure
ATE - Acute Toxicity Estimate
MAK Treshold limit values Germany
LD50 - Lethal Dosie, 50%
LC50 - Lethal concentration, 50%
OECD - Organization for Economic Cooperation and Development
NOAEL - No Observed Adverse Effect Level
EC50 - half maximal effective concentration
NOEC - No Observed Effect Concentration
PBT - Persistent, Bioaccumulative, Toxic
vPvB - very Persistent, very Bioaccumulative
ADR/RID - European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route)/Regulations Concerning the International Transport of Dangerous Goods by Rail (Règlement concernant le transport International ferroviaire de marchandises Dangereuses)
IMDG - International Maritime Dangerous Goods Code
ICAO - International Civil Aviation Association
IATA - International Air Transport Association
VwVws - German administrative regulation on the classification of substances hazardous to water into water hazard classes
AwSV - Ordinance on facilities for handling substances that are hazardous to water

Relevant H- and EUH-phrases (Number and full text):
H226 Flammable liquid and vapour.
H361f Suspected of damaging fertility.
H413 May cause long lasting harmful effects to aquatic life.

The responsibility to ensure safe working conditions within the workplace remains with the user. The information on this SDS is given as a guide to the precautions required to maintain a safe work environment. This product is for professional use only. Not for sale or resale to the general public. Use in applications other than those described above may give rise to risks not covered by the information on this SDS. The physical and chemical properties on this SDS are typical properties and are not a specification. Please report any errors.