

VERDERFLEX®

Special Grease for Rollit Peristaltic Hose Pump Free of Silicon

Safety, Technical, Product and Hazard Data Sheet

Version 1.4v-07/2024

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Verderflex

Chemical Identification Special Grease - free of silicon

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

Use of the substance/

mixture Special Grease for Rollit Peristaltic Hose Pump

Recommendes restrictions

on use Restricted to professional users

1.3 Details of the supplier of the safety data sheet

Company PONNDORF Gerätetechnik GmbH

Leipziger Strasse 374,

34123 Kassel, Germany

Tel Number +49 (561) 51139-0 Fax Numer +49 (561) 51139-88

Emergency Tel Number

For advice on this product call +49 (561) 51139-0

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.



Precautionary statements

Prevention:

P272 Contaminated work clothing should not be

allowed out of the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Hazardous components which must be listed on the label:

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol

Additional Labelling

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical nature : polyalkylene glycol oil special lithium soapl

Components

Chemical name	CASNo. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
dilithium azelate	38900-29-7 254-184-4	Acute Tox.4; H302		>= 1 - < 10
Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol	946-010-7	Skin Sens.1; H317		>= 1 - < 10

For explanation of abbreviations see section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respiration.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water.

Get medical attention immediately if irritation develops and persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.

If eye irritation persists, consult a specialist.

If swallowed : Move the victim to fresh air.

If unconscious, place in recovery position and seek medical advice.

Keep respiratory tract clear.

Do not induce vomiting without medical advice.

Obtain medical attention.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Allergic appearance

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor

responsible for industrial medicine.



5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

Metal oxides

5.3 Advice for firefighters

Special protective equipment for

firefighters : In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment. Exposure to decomposition

products may be a hazard to health.

Further information : Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Use the indicated respiratory protection if the occupational exposure

limit is exceeded and/or in case of product release (dust).

Do not breathe vapours, aerosols.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Try to prevent the material from entering drains or water courses.

Local authorities should be advised if significant spillages cannot be

contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.

For personal protection see section 8.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Smoking, eating and drinking should be prohibited in the application

area.

Wash hands and face before breaks and immediately after handling

the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest. Do not repack.

These safety instructions also apply to empty packaging which may

still contain product residues.

Keep container closed when not in use.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas

and containers : Store in original container. Keep container closed when not in use.

Keep in a dry, cool and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent

leakage. Store in accordance with the particular national

regulations. Keep in properly labelled containers.

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL):

Substance name	End use	Exposure routes	Potential health effects	Value
dilithium azelate	Workers	Dermal	Long-term systemic effects	13.5 mg/kg bw/day
	Workers	Dermal	Long-term local effects	0.172 mg/cm2
bis(4-(1,1,3,3-tetra- methylbutyl)phenyl) amine	Workers	Inhalation	Long-term systemic effects	49.3 mg/m3
	Workers	Dermal	Long-term systemic ef- fects	14 mg/kg bw/ day
Condensation products of fatty acids, tall oil with 2-amino-2-eth-ylpropanediol	Workers	Dermal	Long-term systemic effects	8.33 mg/kg bw/day
O,O,O-triphenyl phos- phorothioate	Workers	Inhalation	Long-term systemic effects	1.39 mg/m3
	Workers	Skin contact	Long-term systemic ef- fects	0.4 mg/kg

Predicted No Effect Concentration (PNEC):

Substance name	Environmental compartment	Value
dilithium azelate	Fresh water	0.023 mg/l
	Marine water	0.002 mg/l
O,O,O-triphenyl phosphorothioate	Sewage treatment plant	1 mg/l
	Soil	2.37 mg/l

8.2 Exposure controls

Engineering measures

none

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends amongst

other things on the material, the thickness and the type of glove and

therefore has to be measured for each case.



Skin and body protection : Choose body protection in relation to its type, to the concentration

and amount of dangerous substances, and to the specific work-

place.

Respiratory protection : Not required; except in case of aerosol formation.

Filter type : Filter type P

Protective measures : The type of protective equipment must be selected according to

the concentration and amount of the dangerous substance at the

specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : paste Colour : beige

Odour : characteristic
Odour Threshold : No data available
pH : Not applicable

substance/mixture is non-soluble (in water)

Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : Not applicable
Evaporation rate : No data available
Flammability (solid, gas) : Combustible Solids

Upper explosion limit /

Upper flammability limit : No data available

Lower explosion limit /

Lower flammability limit : No data available
Vapour pressure : < 0.001 hPa (20 °C)
Relative vapour density : No data available
Relative density : 0.97 (20 °C)

Reference substance: Water The value is calculated

Density : 0.97 g/cm3 (20 °C) Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient:

n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available
Viscosity, kinematic : Not applicable
Explosive properties : Not explosive
Oxidizing properties : No data available



9.2 Other information

Sublimation point : No data available Self-ignition : No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Remarks: Harmful if swallowed.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Symptoms: Redness, Local irritation

Components:

dilithium azelate:

Acute oral toxicity : LD50 (Rat): > 300 mg/kg

Method: OECD Test Guideline 420

GLP: yes



Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 425

Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components: dilithium azelate:

Assessment : No skin irritation Result : No skin irritation

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species : reconstructed human epidermis (RhE)

Assessment : No skin irritation Result : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : Irritating to eyes.

Components: dilithium azelate:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation



Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

dilithium azelate:

Assessment : Does not cause skin sensitisation.
Result : Does not cause skin sensitisation.

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Assessment : May cause sensitisation by skin contact.
Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available Genotoxicity in vivo : Remarks: No data available

Components:

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

Remarks : No data available

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available Effects on foetal development : Remarks: No data available

Components:

Condensation products of fatty acids, tall oil with 2-amino-2-ethylpropanediol:

Reproductive toxicity - Assessment : - Fertility -

Animal testing did not show any effects on fertility.

STOT - single exposure

Components:

dilithium azelate:

Assessment : The substance or mixture is not classified as specific target organ

toxicant, single exposure.

STOT - repeated exposure

Components:

dilithium azelate:

Assessment : The substance or mixture is not classified as specific target organ

toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Product:

This information is not available.

Components:

dilithium azelate:

No aspiration toxicity classification

Further information

Product:

Remarks : Information given is based on data on the components and the toxi

cology of similar products.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other

aquatic invertebrates : Remarks: No data available



Toxicity to algae/aquatic plants : Remarks: No data available Toxicity to microorganisms : Remarks: No data available

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available Physico-chemical removability : Remarks: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to be

> persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumu

lating (vPvB).

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental

compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be

> either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential : The substance/mixture does not contain components considered

> to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Com mission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or

the soil.

Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and na

tional regulations.

Waste codes should be assigned by the user based on the applica

tion for which the product was used.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the

unused product.

Dispose of waste product or used containers according to local

regulations.

The following Waste Codes are only suggestions:

Waste Code : used product, unused product

12 01 12*, spent waxes and fats

uncleaned packagings

15 01 10*, packaging containing residues of or contaminated by

hazardous substances

14. TRANSPORT INFORMATION

14.1 UN number

ADR : Not regulated as a dangerous good RID : Not regulated as a dangerous good IMDG : Not regulated as a dangerous good IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good RID : Not regulated as a dangerous good IMDG : Not regulated as a dangerous good IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good RID : Not regulated as a dangerous good IMDG : Not regulated as a dangerous good IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

ADR : Not regulated as a dangerous good RID : Not regulated as a dangerous good IMDG : Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied

15. REGULATORY INFORMATION

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59). (EU SVHC)

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006

(REACH), Article 57).

: Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer (EC 1005/2009) : Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (recast)

(EU POP) : Not applicable



Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals (EU PIC)

gerous chemicals (EU PIC) : Not applicable

UK REACH List of substances subject to authorisation (Annex XIV)

(UK. REACH Annex XIV) : Not applicable

GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation

(GB PIC) : Not applicable

Regulation (EU) 2019/1148 on the marketing and use

of explosives precursors : Not applicable

15.2 Chemical safety assessment

This information is not available.

16. OTHER INFORMATION

Full text of H-Statements

H302 : Harmful if swallowed.

H317 : May cause an allergic skin reaction.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inven tory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associ ated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - Inter national Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified;



NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organi zation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Preven tion; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authori sation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Sub stance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture:

Classification procedure:

Skin Sens. 1 H317

Calculation method

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