

## perma Multipurpose bio grease SF09

Version 1.3

Revision Date 23.08.2017

Print Date 23.08.2017

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : perma Multipurpose bio grease SF09

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

Use of the Substance/Mixture : Grease  
Recommended restrictions on use : Restricted to professional users.

#### 1.3 Details of the supplier of the safety data sheet

perma-tec GmbH & Co. KG  
Hammelburger Str. 21  
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GERMANY  
Tel: +49 9704 609-0  
Fax: +49 9704 609-50  
info@perma-tec.com

E-mail address : msds@perma-tec.com  
Responsible/issuing person

National contact : H-T-L perma UK  
Lakeside House  
1 Furzeground Way  
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UXBRIDGE UB11 1BD  
MIDDLESEX  
UNITED KINGDOM  
Phone: +44 20 8622 3076  
Fax: +44 20 8622 3200  
www.perma-tec.com

#### 1.4 Emergency telephone number

+49 9704 609-99 (Mo-Do 08:00-16:30, Fr 08:00-12:00)

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### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

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### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### Additional Labelling:

EUH210 Safety data sheet available on request.

EUH208 Contains: Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts May produce an allergic reaction.

### 2.3 Other hazards

## 3. Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : ester oil  
polyurea

### Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Polyurea	1266545-66-7 / 01-0000017721-73-0000 / 01-0000017721-73-0003 / 01-0000017721-73-0001 /	Aquatic Chronic 4; H413	$\geq 10 - < 20$
2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole	59656-20-1 261-844-5	Aquatic Chronic 3; H412	$\geq 1 - < 2.5$
Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts	93820-57-6 298-637-4	Skin Sens. 1B; H317	$\geq 0.1 - < 1$

For the full text of the H-Statements mentioned in this Section, 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 breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
In case of contact, immediately flush skin with plenty of water.
- 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.  
Do not induce vomiting without medical advice.

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### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : None known.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

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## 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

Specific hazards during firefighting : Fire may cause evolution of:  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur 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. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.

Further information : Standard procedure for chemical fires.

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## 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). Avoid breathing dust. 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.

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### 6.3 Methods and materials 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.

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## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Wash hands and face before breaks and immediately after handling the product.

### 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)

: Consult the technical guidelines for the use of this substance/mixture.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL  
2,5-bis(tert-dodecylthio)-  
1,3,4-thiadiazole : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 4.408 mg/m<sup>3</sup>  
  
End Use: Workers  
Exposure routes: Skin contact  
Potential health effects: Long-term systemic effects  
Value: 6.25 mg/kg bw/day

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PNEC	
2,5-bis(tert-dodecyldithio)- 1,3,4-thiadiazole	: Fresh water Value: 0.041 mg/l
	Marine water Value: 0.0041 mg/l
	Intermittent use/release Value: 0.41 mg/l
	Microbiological Activity in Sewage Treatment Systems Value: 8000 mg/l
	Fresh water sediment Value: 380.62 mg/kg
	Marine sediment Value: 38.06 mg/kg
	Soil Value: 308.98 mg/kg
	Oral Value: 6.67 mg/kg

### 8.2 Exposure controls

#### Engineering measures

Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Respiratory protection	: Not required; except in case of aerosol formation. Filter type P
Hand protection	: Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. 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. In case of contact through splashing:  : Nitrile rubber Protective index Class 1
Eye protection	: Tightly fitting safety goggles
Hygiene measures	: Wash face, hands and any exposed skin thoroughly after handling.
Protective measures	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance

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at the specific workplace.  
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

### Environmental exposure controls

General advice : Try to prevent the material from entering drains or water courses.  
Local authorities should be advised if significant spillages cannot be contained.

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	: paste
Colour	: beige
Odour	: characteristic
Odour Threshold	: No data available
pH	: No data available
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
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: < 0.001 hPa, 20 °C
Relative vapour density	: No data available
Density	: 0.94 g/cm <sup>3</sup> , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: No data available

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### 9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

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## 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

Hazardous decomposition products : No decomposition if stored and applied as directed.

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## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Product

Acute oral toxicity	: This information is not available.
Acute inhalation toxicity	: This information is not available.
Acute dermal toxicity	: This information is not available.
Skin corrosion/irritation	: This information is not available.
Serious eye damage/eye irritation	: This information is not available.
Respiratory or skin sensitisation	: This information is not available.
Germ cell mutagenicity	
Genotoxicity in vitro	: No data available
Genotoxicity in vivo	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Teratogenicity	: No data available

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- Repeated dose toxicity : This information is not available.
- Aspiration toxicity : This information is not available.
- Further information : Information given is based on data on the components and the toxicology of similar products.

### Components:

#### **2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole :**

- Acute oral toxicity : LD50: > 5,000 mg/kg, Rat, OECD Test Guideline 401
- Acute inhalation toxicity : LC50: > 2.75 mg/l, 4 h, Rat, vapour, OECD Test Guideline 403, The substance or mixture has no acute inhalation toxicity, An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration., Information given is based on data obtained from similar substances.
- Acute dermal toxicity : LD50: > 2,000 mg/kg, Rat, OECD Test Guideline 402, The substance or mixture has no acute dermal toxicity, Information given is based on data obtained from similar substances.
- Skin corrosion/irritation : Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404
- Serious eye damage/eye irritation : Rabbit, Result: No eye irritation, Classification: No eye irritation, OECD Test Guideline 405
- Respiratory or skin sensitisation : Buehler Test, Guinea pig, Result: Did not cause sensitisation on laboratory animals., Classification: Did not cause sensitisation on laboratory animals., OECD Test Guideline 406
- Germ cell mutagenicity
- Genotoxicity in vitro : In vitro mammalian cell gene mutation test, Chinese hamster fibroblasts, with and without metabolic activation, Result: negative, OECD Test Guideline 473, Information given is based on data obtained from similar substances.
- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- STOT - single exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
- Repeated dose toxicity : Rat, Oral, No observed adverse effect level, 250 mg/kg, OECD Test Guideline 421, Information given is based on data obtained from similar substances.
- STOT - repeated exposure : Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :**



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Acute oral toxicity	: LD50: > 5,000 mg/kg, Rat, OECD Test Guideline 401
Acute inhalation toxicity	: LC50: > 1.9 mg/l, 4 h, Rat, dust/mist, The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50: > 5,000 mg/kg, Rabbit
Skin corrosion/irritation	: Result: No skin irritation, Classification: No skin irritation
Serious eye damage/eye irritation	: Result: No eye irritation, Classification: No eye irritation
Respiratory or skin sensitisation	: Result: The product is a skin sensitiser, sub-category 1B., Classification: The product is a skin sensitiser, sub-category 1B.

## 12. Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish	: No data available
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available
Toxicity to bacteria	: No data available

#### Components:

##### **Polyurea :**

Toxicity to fish	: LC50: > 100 mg/l, 96 h, Danio rerio (zebra fish), static test, OECD Test Guideline 203, GLP: yes
Toxicity to daphnia and other aquatic invertebrates	: EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes

##### **2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole :**

Toxicity to fish	: LC50: > 1,000 mg/l, 96 h, Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates	: EC50: 41 mg/l, 48 h, Daphnia magna (Water flea), OECD Test Guideline 202
Toxicity to algae	: EC50: > 100 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), Growth inhibition, OECD Test Guideline 201

#### **Ecotoxicology Assessment**

Acute aquatic toxicity	: Harmful to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.

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### **Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :**

- Toxicity to fish : LC50: > 100 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), OECD Test Guideline 202
- Toxicity to algae : EC50: > 100 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), OECD Test Guideline 201
- Toxicity to bacteria : EC50: > 10,000 mg/l, 3 h, activated sludge, static test

### 12.2 Persistence and degradability

#### Product:

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

#### Components:

##### **2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole :**

- Biodegradability : Primary biodegradation, 0 %, Result: Not readily biodegradable., Exposure time: 28 d, activated sludge, OECD Test Guideline 301C

##### **Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :**

- Biodegradability : Result: Not readily biodegradable.

### 12.3 Bioaccumulative potential

#### Product:

- Bioaccumulation : 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 bioaccumulating (vPvB).

#### Components:

##### **2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole :**

- Bioaccumulation : Fish, Bioconcentration factor (BCF): 3.16

##### **Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :**

- Bioaccumulation : Bioconcentration factor (BCF): 70.8

### 12.4 Mobility in soil

#### Product:

- Mobility : No data available
- Distribution among environmental compartments : No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

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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.

**Components:**

**2,5-bis(tert-dodecyldithio)-1,3,4-thiadiazole :**

Assessment : Non-classified PBT substance, Non-classified vPvB substance

**Benzenesulfonic acid, di-C10-18-alkyl derivs., calcium salts :**

Assessment : Non-classified PBT substance, Non-classified vPvB substance

### 12.6 Other adverse effects

**Product:**

Additional ecological information : No information on ecology is available.

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## 13. Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
: Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

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## 14. Transport information

### 14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

### 14.2 Proper shipping name

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

### 14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

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Not dangerous goods

### 14.4 Packing group

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

### 14.5 Environmental hazards

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

### 14.6 Special precautions for user

No special precautions required.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable for product as supplied.

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## 15. Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: Not applicable

: 2012/18/EU Update: Not applicable

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) : Not applicable

### 15.2 Chemical safety assessment

This information is not available.

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### 16. Other information

#### Full text of H-Statements referred to under sections 2 and 3.

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

#### Further information

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