

Version 1.2	Revision Date 08.08.2017	Print Date 10.08.201
1. Identification of the substanc	e/mixture and of the company/undertaking	
1.1 Product identifier		
Product name	: perma High performance grease SF04	
1.2 Relevant identified uses of the	substance or mixture and uses advised against	
Use of the	: Grease	
Substance/Mixture Recommended restrictions on use	: Restricted to professional users.	
1.3 Details of the supplier of the sa	fety data sheet	
	perma-tec GmbH & Co. KG Hammelburger Str. 21 97717 EUERDORF GERMANY Tel: +49 9704 609-0 Fax: +49 9704 609-50 info@perma-tec.com	
E-mail address Responsible/issuing person	: msds@perma-tec.com	
National contact	: H-T-L perma UK Lakeside House 1 Furzeground Way Stockley Park 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 0	8:00-12:00)

#### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

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

Eye irritation, Category 2

H319: Causes serious eye irritation.

2.2 Label elements



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Labelling (REGULATION (E	C) N	No 1272/2008)		
Hazard pictograms	:			
Signal word	:	Warning		
Hazard statements	:	H319	Causes serious eye irrita	ation.
Precautionary statements	:	<b>Prevention:</b> P264 P280 <b>Response:</b> P305 + P351 + P3	Wash hands thoroughly Wear eye protection/ fac 338 IF IN EYES: Rinse water for several minute lenses, if present and ea rinsing.	ce protection. cautiously with s. Remove contact
		P337 + P313	If eye irritation persists: ( attention.	Get medical advice/

#### 2.3 Other hazards

#### 3. Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature

: Mineral oil. Synthetic hydrocarbon oil polyurea

#### Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Polyurea	1266545-64-5 / 01-0000017717-62-0001 / / 01-0000017717-62-0000 / 01-0000017717-62-0002	Aquatic Chronic 4; H413	>= 2.5 - < 10
zinc bis[O,O-bis(2- ethylhexyl)] bis(dithiophosphate)	4259-15-8 224-235-5 / 01-2119493635-27-XXXX	Eye Dam. 1; H318 Aquatic Chronic 2; H411	>= 1 - < 2.5

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.



perma High performance	grease SFU4		
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	Keep patient warm and at rest. If unconscious, place in recovery pos advice. Keep respiratory tract clear. If breathing is irregular or stopped, a respiration.		
In case of skin contact	Wash off immediately with soap and Get medical attention immediately if persists. Wash clothing before reuse.	1	
In case of eye contact	for at least 10 minutes.	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.	
If swallowed	<ul> <li>Move the victim to fresh air.</li> <li>If unconscious, place in recovery position and seek medical advice.</li> <li>Keep respiratory tract clear.</li> <li>Do not induce vomiting without medical advice.</li> <li>Never give anything by mouth to an unconscious person.</li> </ul>		
4.2 Most important symptoms and	effects, both acute and delayed		
Symptoms	: No information available.		
Risks	: None known.		
4.3 Indication of any immediate me	edical attention and special treatment nee	ded	
Treatment	: No information available.		
5. Firefighting measures			
5.1 Extinguishing media			
Suitable extinguishing media	: Use water spray, alcohol-resistant fo carbon dioxide.	oam, dry chemical or	
Unsuitable extinguishing media	: High volume water jet		
5.2 Special hazards arising from th			
Specific hazards during firefighting	<ul> <li>Fire may cause evolution of: Carbon oxides Metal oxides Nitrogen oxides (NOx) Oxides of phosphorus Sulphur oxides</li> </ul>		
5.3 Advice for firefighters			
Special protective equipment	: In the event of fire wear self-contain	ad breathing apparatus	

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.



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for firefighters	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.	
6. Accidental release measures	,	
6.1 Personal precautions, protectiv	e equipment and emergency procedures	;
Personal precautions	<ul> <li>Evacuate personnel to safe areas.</li> <li>Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).</li> <li>Avoid breathing dust.</li> <li>Refer to protective measures listed in sections 7 and 8.</li> </ul>	
6.2 Environmental precautions		
Environmental precautions	<ul> <li>Try to prevent the material from entering drains or water courses.</li> <li>Local authorities should be advised if significant spillages cannot be contained.</li> </ul>	
6.3 Methods and materials for cont	ainment 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 se	ection 8.	
7. Handling and storage		
7.1 Precautions for safe handling		
Advice on safe handling	<ul> <li>Avoid contact with skin and eyes. For personal protection see section Smoking, eating and drinking should application area. Wash hands and face before breaks handling the product. Do not get in eyes or mouth or on sk Do not get on skin or clothing. Do not ingest. Do not repack. These safety instructions also apply may still contain product residues.</li> </ul>	d be prohibited in the s and immediately after kin. to empty packaging which

Keep container closed when not in use.

#### 7.2 Conditions for safe storage, including any incompatibilities



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Requirements for storage areas and containers	<ul> <li>Store in original container.</li> <li>Keep container closed when not in use.</li> <li>Keep in a dry, cool and well-ventilated place.</li> <li>Containers which are opened must be carefully resealed and kept upright to prevent leakage.</li> <li>Store in accordance with the particular national regulations.</li> <li>Keep in properly labelled containers.</li> </ul>	
7.3 Specific end use(s)		
	: Consult the technical guidelines for th substance/mixture.	e use of this

#### 8. Exposure controls/personal protection

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL zinc bis[O,O-bis(2- : ethylhexyl)] bis(dithiophosphate)	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 6.6 mg/m3
	End Use: Workers Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 9.6 mg/m3
PNEC zinc bis[0,0-bis(2- : ethylhexyl)] bis(dithiophosphate)	Fresh water Value: 4 µg/l
bis(unnopriosphate)	Marine water Value: 4.6 μg/l
	Sewage treatment plant Value: 3.8 mg/l
	Fresh water sediment Value: 0.322 mg/l
	Marine sediment Value: 0.032 mg/l
	Soil Value: 0.062 mg/l
	Intermittent use/release



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	Value: 44 µg/l	
2 Exposure controls		
Engineering measures		
Maintain air concentrations be	elow occupational exposure standards.	
Personal protective equipmen	t	
Respiratory protection	: Not required; except in case of aero Filter type P	sol formation.
Hand protection	<ul> <li>For prolonged or repeated contact u The selected protective gloves have specifications of EU Directive 89/680 EN 374 derived from it. The break through time depends an material, the thickness and the type to be measured for each case. In case of contact through splashing</li> </ul>	e to satisfy the 6/EEC and the standard nongst other things on the of glove and therefore has
	: Nitrile rubber Protective index Class 1	
Eye protection	: Tightly fitting safety goggles	
Hygiene measures	: Wash face, hands and any exposed handling.	I skin thoroughly after
Protective measures	<ul> <li>The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</li> <li>Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.</li> </ul>	
Environmental exposure conti	rols	
General advice	<ul> <li>Try to prevent the material from enter courses.</li> <li>Local authorities should be advised cannot be contained.</li> </ul>	-

### 9. Physical and chemical properties

<b>9.1 Information on basic physi</b> Form	cal and chemical properties : paste
Colour	: brown
Odour	: characteristic
Odour Threshold	: No data available



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рН	: 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	: 0.90 g/cm3, 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	
2 Other information		
Sublimation point	: No data available	
Bulk density	: 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 c

: No conditions to be specially mentioned.

#### 10.5 Incompatible materials



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Materials to avoid	: No materials to be especially mention	ned.
10.6 Hazardous decomposition p	roducts	
Hazardous decomposition products	: No decomposition if stored and appli	ed as directed.
11. Toxicological information		
11.1 Information on toxicological	effects	
Product		
Acute inhalation toxicity	: This information is not available.	
Skin corrosion/irritation	: This information is not available.	
Serious eye damage/eye irritation	: Irritating to eyes.	
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	
Repeated dose toxicity	: This information is not available.	
Aspiration toxicity	: This information is not available.	
Further information	: Information given is based on data o the toxicology of similar products.	n the components and
<u>Components:</u> Polyurea :		
Acute oral toxicity	: LD50: > 2,000 mg/kg, Rat, Directive B.1., GLP: yes	67/548/EEC, Annex V,
Acute dermal toxicity	: LD50: > 2,000 mg/kg, Rat, OECD Te yes	est Guideline 402, GLP:
Skin corrosion/irritation	: Rabbit, Result: No skin irritation, Clas irritation, OECD Test Guideline 404,	
Serious eye damage/eye irritation	: Rabbit, Result: No eye irritation, Clas irritation, OECD Test Guideline 405,	
Respiratory or skin sensitisation	: Maximisation Test, Guinea pig, Resu sensitisation., OECD Test Guideline	
Germ cell mutagenicity		
Genotoxicity in vitro	: Chromosome aberration test in vitro,	Result: negative

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) :



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Acute oral toxicity	: LD50: 3,100 mg/kg, Rat, OECD Tes	st Guideline 401	
Acute dermal toxicity	: LD50: > 5,000 mg/kg, Rabbit, OECI	LD50: > 5,000 mg/kg, Rabbit, OECD Test Guideline 402	
Skin corrosion/irritation		Rabbit, Result: No skin irritation, Classification: No skin irritation, OECD Test Guideline 404, GLP: yes	
Serious eye damage/eye irritation	<ul> <li>Rabbit, Result: Risk of serious damage to eyes., Classification: Risk of serious damage to eyes., OECD Test Guideline 405, GLP: yes</li> </ul>		
	: Severe eye irritation, May irritate eye damage to eyes.	es., Risk of serious	
Respiratory or skin sensitisation	: Maximisation Test, Guinea pig, Res sensitisation., OECD Test Guideline		

### 12. Ecological information

#### 12.1 Toxicity

:						
:	No data available					
	No data available					
•	No data available					
:	No data available					
:	LC50: > 100 mg/l, 96 h, Danio rerio (zebra fish), static test, OECD Test Guideline 203, GLP: yes					
:	EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202, GLP: yes					
:	EC50: > 100 mg/l, 72 h, Desmodesmus subspicatus (green algae), Growth inhibition, OECD Test Guideline 201, GLP: yes					
:	EC50: > 1,000 mg/l, 3 h, Bacteria, Respiration inhibition, OECD 209, GLP: yes					
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) :						
:	LC50: 4.4 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, OECD Test Guideline 203					
:	EC50: 75 mg/l, 48 h, Daphnia magna (Water flea), Immobilization, OECD Test Guideline 202					
	: : bis					



Toxicity to algae			
	-	ErC50: 240 mg/l, 72 h, Desmodesmus algae), Growth inhibition, OECD Test Go yes	
Toxicity to bacteria	:	EC50: 380 mg/l, 16 h, Pseudomonas p	utida, GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50: > 0.53 mg/l, 21 d, Daphnia magna (Water flea), OECD Test Guideline 211, Information given is based on data obtained from similar substances.	
2.2 Persistence and degradability			
Product:			
Biodegradability	:		
Physico-chemical removability <u>Components:</u>	:	No data available No data available	
Polyurea :			
Biodegradability	:	Primary biodegradation, 10 %, Result: Ne biodegradable, Exposure time: 28 d, acti 301 F, GLP: yes	
zinc bis[O,O-bis(2-ethylhexyl)]	bis	(dithiophosphate) :	
Biodegradability	:	< 5 %, Result: Not rapidly biodegradable	, OECD 301 D
2.3 Bioaccumulative potential			
Product:			
Bioaccumulation			
		This mixture contains no substance conspersistent, bioaccumulating and toxic (PE contains no substance considered to be very bioaccumulating (vPvB).	3T)., This mixture
2.4 Mobility in soil			
Product:			
Mobility Distribution among environmental compartments 2.5 Results of PBT and vPvB asse	:	No data available No data available ment	
Product:			
Assessment	:	This substance/mixture contains no composition to be either persistent, bioaccumulative a very persistent and very bioaccumulative 0.1% or higher.	and toxic (PBT), or
<u>Components:</u> zinc bis[0,0-bis(2-ethylhexyl)]		(dithiophosphate) :	
Assessment	:	Non-classified PBT substance, Non-class	SITIED VPVB SUbstance
2.6 Other adverse effects			
Product:			



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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.				
	: Waste codes should be assigned by the application for which the product was use				
Contaminated packaging	: Empty containers can be landfilled, wher the local regulations.	n in accordance with			

#### 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 Not dangerous goods

#### 14.4 Packing group

ADR Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods

14.5 Environmental hazards ADR



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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**<br/>RemarksRemarks: Not applicable for product as supplied.

#### 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).	:		bes not contain substances of very high lation (EC) No 1907/2006 (REACH), Article 57).
Major Accident Hazard Legislation	:	96/82/EC Not applicable	Update:
	:	2012/18/EU Not applicable	Update:
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.

#### 16. Other information

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

H318Causes serious eye damage.H319Causes serious eye irritation.H411Toxic to aquatic life with long lasting effects.H413May cause long lasting harmful effects to aquatic life.

**Further information** 



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