

according to Regulation (EC) No 1907/2006

TUNGREASE BS 1kg D-GB-F-I-E-PL Fett

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

1.1. Product identifier

TUNGREASE BS 1kg D-GB-F-I-E-PL Fett

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

Use of the substance/mixture

Lubricants, greases, release products

1.3. Details of the supplier of the safety data sheet

Company name: TUNAP GmbH & Co. KG
Street: Bürgermeister-Seidl-Str. 2
Place: D-82515 Wolfratshausen

Telephone: +49 (0) 8171/1600 - 0 Telefax: +49 (0) 8171/1600 - 40

e-mail: sdb@tunap.com Internet: www.tunap.com

1.4. Emergency telephone +49 (0) 30 30 686 790 (Giftnotruf Berlin)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container according to the official regulations.

Special labelling of certain mixtures

EUH208 Contains Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen

dithiophosphate. May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification		•		
	Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate				
	947-946-9		01-2120772600-59		
	Skin Irrit. 2, Skin Sens. 1B, Aquatic	Chronic 4; H315 H317 H413			
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]		0.1 - < 1 %	
	273-066-3		01-2119535109-41		
	Repr. 2, STOT RE 2, Aquatic Chror				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eves

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatique, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protection equipment.

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). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Observe instructions for use.

Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When using do not eat, drink, smoke, sniff.

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydroge	n dithiophosphate	
Worker DNEL,	long-term	inhalation	systemic	4,93 mg/m³
Worker DNEL,	long-term	dermal	systemic	1,4 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	0,87 mg/m³
Consumer DN	EL, long-term	dermal	systemic	0,5 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	0,5 mg/kg bw/day
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosph	nate >5%]		
Worker DNEL,	long-term	inhalation	systemic	0,145 mg/m³
Worker DNEL,	acute	inhalation	systemic	700 mg/m³
Worker DNEL, long-term		dermal	systemic	0,416 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	2000 mg/kg bw/day
Worker DNEL, acute		dermal	local	16 mg/cm²
Consumer DN	EL, acute	inhalation	systemic	350 mg/m³
Consumer DN	EL, long-term	dermal	systemic	0,208 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	100 mg/kg bw/day
Consumer DNEL, acute		dermal	local	8 mg/cm²
Consumer DN	EL, long-term	oral	systemic	0,04 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	50 mg/kg bw/day

PNEC values

CAS No	Substance		
Environment	Environmental compartment Value		
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]		
Freshwater		0 mg/l	
Freshwater (intermittent releases) 0,015 mg		0,015 mg/l	
Marine water		0 mg/l	
Freshwater sediment		0,185 mg/kg	
Marine sediment		0,018 mg/kg	
Secondary poisoning 1,85		1,85 mg/kg	
Micro-organisms in sewage treatment plants (STP)		100 mg/l	
Soil		2,5 mg/kg	

Additional advice on limit values

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

blood (B)

Urine (U)



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8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.

DIN EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

EN ISO 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)...

Filtering device with filter or ventilator filtering device of type: A

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: pasty
Colour: opaque
Odour: characteristic

Test method

pH-Value (at 20 °C): not applicable DIN 19268

Changes in the physical state

Initial boiling point and boiling range:

Melting point: No information available.

250 °C

Sublimation point:

No information available.

Softening point:

No information available.

Flash point: > 150 °C ISO 3679

No information available.

Density (at 20 °C): 0,9 g/cm³ DIN 51757

Vapour pressure:



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Water solubility: The study does not need to be conducted

because the substance is known to be

insoluble in water.

Partition coefficient: No information available.

Viscosity / dynamic: No information available. DIN 53019-1

Flow time: No information available.

(at 20 °C)

Vapour density:

Evaporation rate:

No information available.

Solvent separation test:

No information available.

No information available.

No information available.

9.2. Other information

Solid content: No information available.

SECTION 10: Stability and reactivity

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose		Species	Source
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]				
	oral	LD50	> 5000 mg/kg	Rat	
	dermal	LD50 mg/kg	> 10000	Rabbit	Study report (1976)
	inhalation (1 h) aerosol	LC50	> 200 mg/l	Rat	



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Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Contains Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

Additional information on tests

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source		
	Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate							
	Acute algae toxicity	ErC50 >	> 100 mg/l		Pseudokirchneriella subcapitata	REACh Registration Dossier		
	Acute bacteria toxicity	(> 1000 mg/	1)		activated sludge of a predominantly domestic sewag	REACh Registration Dossier		
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]							
	Acute fish toxicity	LC50 1	1,6 mg/l		Oncorhynchus mykiss (Rainbow trout)	REACh Registration Dossier		
	Acute crustacea toxicity	EC50 2	2.44 mg/l	48 h	Daphnia magna	REACh Registration Dossier		
	Fish toxicity	NOEC C),0031 mg/l	33 d	Pimephales promelas	REACh Registration Dossier		
	Crustacea toxicity	NOEC 0),0415 mg/l	21 d	Daphnia magna	REACh Registration Dossier		
	Acute bacteria toxicity	(> 1000 mg/	l)	3 h	activated sludge, domestic	REACh Registration Dossier		

12.2. Persistence and degradability

There are no data available on the mixture itself. AOX (mg/l): 0

12.3. Bioaccumulative potential

There are no data available on the mixture itself.



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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]	85000 - 150000

BCF

CAS No	Chemical name	BCF	Species	Source
68937-41-7	Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate >5%]	225	Lepomis macrochirus	REACh Registration D

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available.

Further information

Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

120112 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF

METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of

metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - used product

120112 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF

METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of

metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Water (with cleaning agent). Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.



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14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine pollutant:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): No information available. 2004/42/EC (VOC): No information available.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,9,10,11,12,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits TWA (EC): Time-Weighted Average

ATE: Acute Toxicity Estimate



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STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

EUH208 Contains Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen

dithiophosphate. May produce an allergic reaction.

Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]: Calculation method.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)