

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 1 of 10

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

1.1. Product identifier

HPM Power Grease

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: HPM Technologie GmbH Street: Paul-Lechler-Straße 21 Place: D-72581 DetTigner/Erms

Telephone: +49 7123 88039-10 Telefax: +49 7123 88039-81

e-mail: info@hpmtechnologie.de e-mail (Contact person): info@hpmtechnologie.de info@hpmtechnologie.de internet: www.hpmtechnologie.de 449 7123 88039-10

Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Aerosol 1; H222-H229 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Hydrocarbons, C7-C9, isoalkanes

Signal word: Danger

Pictograms:





Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 2 of 10

Hazardous components

CAS No	Chemical name	Chemical name				
	EC No	Index No	REACH No			
	Classification (Regulation (EC) No 1272/2008)	-			
106-97-8	butane			35 - < 40 %		
	203-448-7	601-004-00-0	01-2119474691-32			
	Flam. Gas 1, Liquefied gas	Flam. Gas 1, Liquefied gas; H220 H280				
	Hydrocarbons, C7-C9, isoa	15 - < 20 %				
	921-728-3		01-2119471305-42			
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411					
74-98-6	propane			15 - < 20 %		
	200-827-9	601-003-00-5	01-2119486944-21			
	Flam. Gas 1, Liquefied gas					

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
	921-728-3	Hydrocarbons, C7-C9, isoalkanes	15 - < 20 %
	inhalation: LC50	D = (> 20) mg/l (vapours); dermal: LD50 = > 2200 - 2500 mg/kg; oral: LD50 = > 7100 - 7800 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. In case of eye irritation consult an ophthalmologist.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurized container: May burst if heated. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18.07.2022 Page 3 of 10

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

Further information on handling

Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Lubricants, greases, release products

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Name of agent			
DNEL type	DNEL type		Effect	Value
	Hydrocarbons, C7-C9, isoalkanes			
Worker DNEL, long-term		dermal	systemic	773 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	2035 mg/m ³
Consumer DNEL, long-term		dermal	systemic	699 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	608 mg/m ³
Consumer DNEL, long-term		oral	systemic	699 mg/kg bw/day

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Suitable eye protection: goggles (EN 166)

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 4 of 10

Hand protection

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) (0,4 mm), Breakthrough time: 60min, Butyl caoutchouc (butyl rubber) (0,3 mm) Wearing time with occasional contact (splashes): 10 min EN ISO 374

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.

Skin protection

Wear anti-static footwear and clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Suitable respiratory protection apparatus: Combination filtering device A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: white Odour: like: Solvent

Test method

not applicable Melting point/freezing point: Boiling point or initial boiling point and boiling range: < -20 °C

Flammability

Solid/liquid: not applicable not applicable Gas: Lower explosion limits: 0,7 vol. % Upper explosion limits: 10,9 vol. % < -20 °C Flash point: > 200 °C Auto-ignition temperature: not determined Decomposition temperature: pH-Value: not applicable Viscosity / kinematic: not applicable Water solubility: practically insoluble (at 20 °C)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: not determined

Density (at 20 °C): 0,64 g/cm³ calculated.

not determined Relative vapour density:

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Heating may cause an explosion.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined Solid content: not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurized container: May burst if heated.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 5 of 10

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
	Hydrocarbons, C7-C9, isoalkanes					
	oral	LD50 > 7100 7800 mg/kg	0 -	Rat	Study report (1961)	OECD Guideline 401
	dermal	LD50 > 2200 2500 mg/kg	0 -	Rabbit		Standard acute method, applying 4 differ
	inhalation (4 h) vapour	LC50 (> 20)	mg/l	Rat		

Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C7-C9, isoalkanes)

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.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 6 of 10

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
106-97-8	butane							
	Acute fish toxicity	LC50	49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A		
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.	
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.	
	Hydrocarbons, C7-C9, isoa	alkanes						
	Acute fish toxicity	LC50	0,11 mg/l	96 h	Oncorhynchus mykiss	SIDS Initial Assessment Report For SIAM	OECD Guideline 203	
	Acute algae toxicity	ErC50	12 mg/l	72 h	Pseudokirchneriella subcapitata	SIDS Initial Assessment Report For SIAM	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	ca. 2,4	48 h		Publication (1986)	other: As described in: The evaluation o	
	Fish toxicity	NOEC	0,778 mg/l	28 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2009)	The aquatic toxicity was estimated by a	
	Crustacea toxicity	NOEC	1 mg/l	21 d		SIDS Initial Assessment Report For SIAM	OECD Guideline 211	
74-98-6	propane							
	Acute fish toxicity	LC50	49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A		
	Acute algae toxicity	ErC50	19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.	
	Acute crustacea toxicity	EC50	69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation	-		
	Hydrocarbons, C7-C9, isoalkanes			
	Biodegradation 22,4% 28			
	Not readily biodegradable (according to OECD crite	eria)		

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	1,09
	Hydrocarbons, C7-C9, isoalkanes	>4
74-98-6	propane	1,09

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 7 of 10

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

List of Wastes Code - residues/unused products

160504

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:UN 195014.2. UN proper shipping name:AEROSOLS

14.3. Transport hazard class(es):214.4. Packing group:-Hazard label:2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Inland waterways transport (ADN)

14.1. UN number or ID number:UN 195014.2. UN proper shipping name:AEROSOLS

 14.3. Transport hazard class(es):
 2

 14.4. Packing group:

 Hazard label:
 2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Excepted quantity: E0

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 8 of 10

Marine transport (IMDG)

14.1. UN number or ID number: UN 1950 14.2. UN proper shipping name: **AEROSOLS**

14.3. Transport hazard class(es): 14.4. Packing group: 2.1 Hazard label:



2.1

63, 190, 277, 327, 344, 381, 959 **Special Provisions:**

1000 mL Limited quantity: Excepted quantity: FO F-D, S-U EmS:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1950

14.2. UN proper shipping name: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es): 2.1 14.4. Packing group: Hazard label: 2.1



A145 A167 A802 **Special Provisions:**

Limited quantity Passenger: 30 kg G Passenger LQ: Y203 E0 Excepted quantity:

203 IATA-packing instructions - Passenger: 75 kg IATA-max. quantity - Passenger: 203 IATA-packing instructions - Cargo: IATA-max. quantity - Cargo: 150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40 2010/75/EU (VOC): 79,2 % (506,88 g/l) 2004/42/EC (VOC): 79,2 % (506,88 g/l)

Information according to 2012/18/EU P3a FLAMMABLE AEROSOLS

(SEVESO III):

Additional information

Aerosol Directive (75/324/). National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work

protection guideline' (94/33/EC).

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

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 9 of 10

Changes

This data sheet contains changes from the previous version in section(s): 6,7,11.

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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 LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen

relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter

R.20 (Table of terms and abbreviations).

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

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Skin Irrit. 2; H315	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product

according to Regulation (EC) No 1907/2006

HPM Power Grease

Version 1.0 revised 18/07/2022 Page 10 of 10

properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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