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Revision Date

Revision Number 0

Section 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product Code(s) HTMOG5
Product Name WHITE LITHIUM GREASE
Synonyms AP1

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

Recommended Use Lubricants, Greases and Release Products, Sealant

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

BMS España
Parque tecnologico del Vallès
Calle Paletes no. 8, Edificio B
08290 Cerdanyola de Vallès Barcelona
Tel : +34/93.565.07.56
Fax : +34/93.565.07.57
Mail : bms@bmsespana.eu

For further information, please contact

E-mail Address bms@bmsespana.eu

1.4. Emergency telephone number

Emergency Telephone Number +34/93.565.07.56

Europe	112
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Section 2. Hazards identification**2.1. Classification of the substance or mixture**

REGULATION (EC) No 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

Symbol(s) N - Dangerous for the environment
R-code(s) N;R51-53

2.2. Label Elements

**Indication of danger**

N - Dangerous for the environment

R-phrases(s)

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases(s)

S60 - This material and its container must be disposed of as hazardous waste

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

2.3. Other information**Section 3. Composition/information on ingredients****3.1. Substances**

Not applicable

3.2. Mixtures

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	278-011-7	74869-21-9	80-90	-	-	No data available
Zinc oxide	215-222-5	1314-13-2	5-10	N; R50-53 PBT	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	-	68649-42-3	1-2	Xi;R36/38 N;R51/53	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

Note

The full refining history is known for this product and it can be shown that the substance from which it is produced is not a carcinogen. This note applies only to certain complex oil derived substances in Annex I.

Section 4. First aid measures**4.1. Description of first-aid measures**

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air.

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

Most Important Symptoms/Effects No information available.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Dry powder. Carbon dioxide (CO₂). Foam. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Burning produces obnoxious and toxic fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Heavy metal compounds. Halogenated compounds

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling

Handling

Wear personal protective equipment. Ensure adequate ventilation.

Hygiene Measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in a bunded area

7.3. Specific end use(s)**Exposure Scenario**

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection

8.1. Control parameters**Exposure Limits**

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Zinc oxide 1314-13-2			VME: 5 mg/m ³ VME: 10 mg/m ³	VLA-EC: 10 mg/m ³ VLA-ED: 5 mg/m ³ VLA-ED: 10 mg/m ³	MAK: 1 mg/m ³ Ceiling / Peak: 1 mg/m ³

Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Zinc oxide 1314-13-2		STEL: 10 mg/m ³ TWA: 2 mg/m ³		TWA: 2 mg/m ³ STEL: 10 mg/m ³	TWA: 4 mg/m ³

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Zinc oxide 1314-13-2	MAK: 5 mg/m ³	STEL: 3 mg/m ³ MAK: 3 mg/m ³	NDSch: 10 mg/m ³ NDS: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³

Derived No Effect Level

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls**Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye Protection**

Safety glasses with side-shields.

Skin and Body Protection

Long sleeved clothing.

Hand Protection

Protective gloves.

Respiratory Protection

None required under normal usage. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls

Local authorities should be advised if significant spillages cannot be contained. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Section 9. Physical and chemical properties

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Semi-fluid (gel).	Appearance	Off-white
Odor	Petroleum Oil-Pungent.		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	Neutral	None known
Melting Point/Range	NONE	None known
Boiling Point/Boiling Range	>316°C / 600.8°F	None known
Flash Point	> 221°C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Vapor Pressure	No data available.	None known
Vapor Density	No data available.	None known
Relative Density	No data available	None known
Specific Gravity	0.96	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	Largely	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%)	None
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Section 10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

None under normal use.

Section 11. Toxicological information

11.1.

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation	None known.
Eye Contact	None known.
Skin Contact	None known.
Ingestion	Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc oxide	> 5000 mg/kg (Rat)		
Titanium dioxide	> 10000 mg/kg (Rat)		> 6820 mg/m ³

Sensitization	None known.
Mutagenic Effects	None known.
Carcinogenic Effects	None known.
Reproductive Toxicity	None known.
Developmental Toxicity	None known.
STOT - single exposure	None known
STOT - repeated exposure	None known
Target Organ Effects	Lungs. Respiratory system.
Aspiration Hazard	Not applicable

Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.		LC50 96 h: > 2000 mg/L (Salmo gairdneri)		
Zinc oxide	Selenastrum capricornutum 72-hour EC50: 0.14 mg/l	Oncorhynchus mykiss 96-hour LC50: 0.14 mg/l		Daphnia magna 48-hour EC50: 0.07 mg/l
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts		LC50 96 h: 1.0-5.0 mg/L static (Pimephales promelas) LC50 96 h: 10.0-35.0 mg/L semi-static (Pimephales promelas)		EC50 48 h: 1 - 1.5 mg/L (Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential.

No information available.

12.4. Mobility in soil

Adsorbs on soil.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations
Contaminated Packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other Information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14. Transport information

IMDG/IMO

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s.(Zinc oxide, Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts),9,PG III,Marine Pollutant
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
EmS No.	F-A, S-F
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

RID

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082 Environmentally hazardous substance, liquid, n.o.s.(Zinc oxide, Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts),9,III
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	M6

ADR

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082 Environmentally hazardous substance, liquid, n.o.s.(Zinc oxide, Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts),9,III(E)
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	M6
Tunnel Restriction Code	(E)

Section 14. Transport information

ICAO

14.1. UN-Number	UN3082
14.2. Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zinc oxide, Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts), 9, PG III
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

IATA

14.1. UN-Number	UN3082
14.2. Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class	9
14.4. Packing Group	III
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Zinc oxide, Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts), 9, PG III
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
ERG Code	9L

Section 15. Regulatory information

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

WGK Classification Water endangering class = 2

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Not determined
IECSC	Complies
AICS	Not determined
KECL	Not determined

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Section 16. Other information**Full text of R-phrases referred to under Sections 2 and 3**

R53 - May cause long-term adverse effects in the aquatic environment

R50 - Very toxic to aquatic organisms

R36/38 - Irritating to eyes and skin

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Key literature references and sources for data

www.ChemADVISOR.com/

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Revision Date

Revision Note Initial Release.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet