according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 1 of 10

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

1.1. Product identifier

ADDINOL Liquid Grease SGR 4-00-9 P

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

Use of the substance/mixture

Lubricant and additive.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name: ADDINOL Lube Oil GmbH

Gebäude 4609

Street: Am Haupttor Place: D-06237 Leuna

Telephone: +49 (0) 3461 845-0 Telefax: +49 (0) 3461 845-555

e-mail: info@addinol.de
Contact person: Application Technology

Internet: www.addinol.de

Responsible Department: ADDINOL Application Technology

Supplier

Company name: GEM OILS LIMITED

Place: IRL-H12 E4W2 Regaskin Co. Cavan

Telephone: +353 49 4378116 Telefax: +353 49 4368329

e-mail: sales@gemoils.ie

Contact person: GEM OILS LIMITED Telephone: +353 49 4378116

e-mail: sales@gemoils.ie
Internet: https://gemoils.ie/

1.4. Emergency telephone Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Special labelling of certain mixtures

EUH208 Contains Zinc naphthenate, Di-Tert-Dodecyl Polysulphide. May produce an allergic

reaction.

EUH210 Safety data sheet available on request.

Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

2.3. Other hazards

No risks worthy of mention.

If handled with proper care and at intended use, the product does not cause any harmful effects acc. to our experiences and available information.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Print date: 22.07.2022

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 2 of 10

Chemical characterization

Lithium saponified mineral oil based grease with EP additives.

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (Regulation (EC) No	1272/2008)				
12001-85-3	11-85-3 Zinc naphthenate					
	234-409-2					
	Eye Irrit. 2, Skin Sens. 1B, Aquatic Chronic 2; H319 H317 H411					
68425-15-0	Di-Tert-Dodecyl Polysulphide					
	270-335-7		01-2119540516-41			
	Skin Sens. 1B; H317					

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				
12001-85-3	234-409-2	Zinc naphthenate	0.5 - < 1 %		
	oral: LD50 = > 2000 mg/kg				
68425-15-0	270-335-7	335-7 Di-Tert-Dodecyl Polysulphide			
	inhalation: LC50 = > 15,5 mg/l (vapours); dermal: LD50 = 2000 mg/kg; oral: LD50 = 19500 mg/kg				

Further Information

DMSO-Extrakt < 3 %, IP 346.

Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Self-protection of the first aider. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

After inhalation

Provide fresh air. not applicable

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Use skin protection ointment after cleaning.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

Rinse mouth thoroughly with water. Call a physician immediately.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 3 of 10

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Extinguishing powder. Sand. alcohol resistant foam.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Sulfur oxides, carbon black.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray/stream to protect personnel and to cool endangered containers. In case of fire and/or explosion do not breathe fumes. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

High slip hazard because of leaking or spilled product. Avoid contact with skin, eye and clothing. Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Dispose of waste according to applicable legislation. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Refer to the provisions listed in Sections 8, 12 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eye and clothing.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Wash hands before breaks and after work. Take off immediately all contaminated clothing. Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Keep container tightly closed in a cool place.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents.

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 4 of 10

Further information on storage conditions

Protect against: UV-radiation/sunlight. frost. Recommended storage temperature: 5 - 40°C

7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
12001-85-3	Zinc naphthenate					
Worker DNEL,	long-term	inhalation	systemic	1,18 mg/m³		
Worker DNEL,	long-term	dermal	systemic	3,3 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	systemic	0,29 mg/m³		
Consumer DNEL, long-term		dermal	systemic	1,7 mg/kg bw/day		
68425-15-0	Di-Tert-Dodecyl Polysulphide					
Worker DNEL, long-term		inhalation	systemic	23,5 mg/m³		
Worker DNEL, long-term		dermal	systemic	33,3 mg/kg bw/day		
Consumer DNEL, long-term		oral	systemic	1,66 mg/kg bw/day		
Consumer DNEL, long-term		dermal	systemic	16,6 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	systemic	5,8 mg/m³		

PNEC values

CAS No	Substance				
Environmental	Environmental compartment				
12001-85-3	Zinc naphthenate				
Freshwater		0,004 mg/l			
Freshwater (in	0,04 mg/l				
Marine water		0 mg/l			
Freshwater sediment		0,015 mg/kg			
Marine sedime	0,002 mg/kg				
Micro-organism	0,6897 mg/l				
Soil	0,001 mg/kg				

Additional advice on limit values

The product does not contain any relevant quantities of substances with legally established exposure limitation.

8.2. Exposure controls





Individual protection measures, such as personal protective equipment

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 5 of 10

Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): EN 166

Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 374

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber). Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber). Thickness of glove material: 0.4 mm

Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing. Change contaminated clothing. Do not put any product-impregnated cleaning rags into your trouser pockets.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: viscous
Colour: light brown
Odour: characteristic

Test method

Changes in the physical state

Melting point/freezing point: > 120 °C
Boiling point or initial boiling point and > 250 °C

boiling range:

Drop point/drop range: $>180 \,^{\circ}\text{C}$ DIN ISO 2176 Flash point: $>200 \,^{\circ}\text{C}$ DIN EN ISO 2592

Flammability

Solid/liquid: No data available
Gas: No data available

Explosive properties

evaluation: not Explosive.

Lower explosion limits:

Upper explosion limits:

No data available

No data available

Auto-ignition temperature:

No data available

Self-ignition temperature

Solid: incapable of spontaneous heating.
Gas: No data available

Decomposition temperature: No data available

pH-Value: No data available

Viscosity / kinematic: 200 mm²/s DIN 51562 - Base oil

(at 40 °C)

Water solubility: virtually insoluble

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 6 of 10

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

No data available

No data available

Density (at 20 °C): 0,93 g/cm³ DIN 51757

Relative vapour density:

No data available

9.2. Other information

Oxidizing properties

No data available

Evaporation rate: No data available

Further InformationNo data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.

Do not overheat to avoid decomposition by heat.

10.5. Incompatible materials

Reacts with: Oxidizing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Sulfur oxides. carbon black.

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.

No data available

Mixture not tested.

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 7 of 10

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
12001-85-3	Zinc naphthenate							
	oral	LD50 mg/kg	> 2000	Rat	Study report (2018)	OECD Guideline 423		
68425-15-0	Di-Tert-Dodecyl Polysulphide							
	oral	LD50 mg/kg	19500	Rat	OECD 401			
	dermal	LD50 mg/kg	2000	Rat	OECD 402			
	inhalation (4 h) vapour	LC50 mg/l	> 15,5	Rat	OECD 403			

Irritation and corrosivity

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

Irritant effect on the eye: non-irritant.

Irritant effect on the skin: Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Sensitising effects

Contains Zinc naphthenate, Di-Tert-Dodecyl Polysulphide. May produce an allergic reaction.

Evaluation: no danger of sensitization.

Carcinogenic/mutagenic/toxic effects for reproduction

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

No data available

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.

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Aspiration hazard

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

Specific effects in experiment on an animal

No data available

11.2. Information on other hazards

Endocrine disrupting properties

not applicable

Further information

If handled with proper care and at intended use, the product does not cause any harmful effects acc. to our experiences and available information.

SECTION 12: Ecological information

12.1. Toxicity

No data available

Mixture not tested.

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 8 of 10

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
12001-85-3	Zinc naphthenate							
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Cyprinus carpio	REACh Registration Dossier	OECD Guideline 203	
	Acute algae toxicity	ErC50	4 mg/l	72 h	Pseudokirchneriella subcapitata	REACh Registration Dossier	OECD Guideline 201	
	Acute crustacea toxicity	EL50	35 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202	
	Acute bacteria toxicity	(EC50	5,2 mg/l)	3 h	activated sludge of a predominantly domestic sewag	Water research volume 17, nr10, 1363-136	OECD Guideline 209	
68425-15-0	Di-Tert-Dodecyl Polysulphide							
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Danio rerio (zebrafish)	OECD 203		
	Acute algae toxicity	ErC50 mg/l	< 0,08	72 h	Pseudokirchneriella subcapitata	OECD 201		
	Acute crustacea toxicity	EC50 mg/l	< 0,1	48 h	Daphnia magna			

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	
12001-85-3	Zinc naphthenate	0,8
68425-15-0	Di-Tert-Dodecyl Polysulphide	6,2

BCF

CAS No	Chemical name	BCF	Species	Source
12001-85-3	Zinc naphthenate	69,48	Capoeta fusca	Water Qual Expo Heal

12.4. Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological waste water treatment plants.

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.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

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 data available

Further information

Do not allow uncontrolled leakage of product into the environment.

SECTION 13: Disposal considerations

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 9 of 10

13.1. Waste treatment methods

Disposal recommendations

Must not be disposed of with domestic refuse. Do not allow to enter into surface water or drains.

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

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Dispose of waste according to applicable legislation. Packing which cannot be properly cleaned must be thrown away.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:

14.2. UN proper shipping name: 14.3. Transport hazard class(es):

14.4. Packing group:

Inland waterways transport (ADN)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

Marine transport (IMDG)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

National regulatory information

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

Changes

according to Regulation (EC) No 1907/2006

ADDINOL Liquid Grease SGR 4-00-9 P

Revision date: 21.07.2022 Product code: 717042 Page 10 of 10

This data sheet contains changes from the previous version in section(s): 2,11.

Relevant H and EUH statements (number and full text)

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains Zinc naphthenate, Di-Tert-Dodecyl Polysulphide. May produce an allergic

reaction.

EUH210 Safety data sheet available on request.

Further Information

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road: ADN -European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ASTM - American Society for the Testing of Materials; ATE - Acute Toxicity Estimates; bw - Body weight; CAO -Cargo Aircraft Only; CAS - Chemical Abstracts Service; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DNEL - Derived No-Effect Level; DOT -Department of Transportation; DSL - Domestic Substances List (Canada); EG - European Union; EN -European standards; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n;o;s; - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program: OECD - Organization for Economic Co-operation and Development: PBT -Persistent, Bioaccumulative and Toxic substance; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulation concerning the International Carriage of Dangerous Goods by Rail; RQ -Reportable Quantity; SADT - Self- Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TSCA - Toxic Substances Control Act (United States); UN -United Nations; vPvB - Very Persistent and Very Bioaccumulative

These given data only refer to the named product. If the product is used together with other materials or in manufacturing processes the data might not be applicable any more. The data are based on today's state of our knowledge and experience. They are, however, no guarantee of any specific product properties and do not established any legally valid contractual relationship.

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.)