



Safety Data Sheet

according to Regulation (EC) No 1907/2006

ADDINOL Eco Gear 460 S

Print date: 12.05.2014

Product code: 741084

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

1.1. Product identifier

ADDINOL Eco Gear 460 S

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

Use of the substance/mixture

Gearbox oil.

1.3. Details of the supplier of the safety data sheet

Company name:	ADDINOL Lube Oil GmbH	
	Gebäude 4609	
Street:	Am Haupttor	
Place:	D-06237 Leuna	
Telephone:	+49 (0) 3461 845-201	Telefax: +49 (0) 3461 845-561
e-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	

1.4. Emergency telephone number: +49 (0) 3461 845-201 - This number is serviced during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The preparation is not dangerous in the sense of Directive 1999/45/EC.

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

2.2. Label elements

Special labelling of certain mixtures

EUH208	Contains < 1% Polysulfides, Di-tert-butyl. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other hazards

Following symptoms can occur: Allergic reactions.

Harmful if swallowed.

Spilled product must not leak into the ground.

Do not allow uncontrolled leakage of product into the environment.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
272-028-3	Zinc alkyldithiophosphate	<= 1 %
68649-42-3	Xi - Irritant, N - Dangerous for the environment R36-51-53	
	Eye Irrit. 2, Aquatic Chronic 2; H319 H411	
273-103-3	Polysulfides, Di-tert-butyl	< 1 %
68937-96-2	Xi - Irritant R38-43-52-53	
	Skin Sens. 1, Aquatic Chronic 3; H317 H412	
290-636-7	Calcium alkyl(C10-60)benzensulfonates	< 0,25 %
90194-27-7	Xi - Irritant R43-53	
	Skin Sens. 1, Aquatic Chronic 4; H317 H413	

Full text of R and H phrases: see Section 16.

Further Information

DMSO-Extrakt < 3 %, IP 346.

Concentration of PCBs < 1mg/kg.

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

Move victim to fresh air. Put victim at rest and keep warm. Seek medical attention if problems persist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do not induce vomiting.

Rinse mouth thoroughly with water. Immediately get medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO₂). Atomized water.

Unsuitable extinguishing media

High power water jet.



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5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO_x). Carbon black.

5.3. Advice for firefighters

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

Additional information

Extinguishing materials should be selected according to the surrounding area. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear respiratory protection when in the presence of vapour, dust, and aerosols.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed. Prevent spreading over great surfaces (e.g. by damming or installing oil booms).

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). Treat the assimilated material according to the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid oil mist Avoid contact with skin, eye and clothing.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

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 absorption of dampness.

Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents.

Further information on storage conditions

Recommended storage temperature: 10 - 30°C

Protect against: heat. UV-radiation/sunlight. frost.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Recommended limit value for oil mist

TWA: 5 mg/m³

STEL: 10 mg/m³

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

8.2. Exposure controls



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Appropriate engineering controls

Provide for sufficient ventilation and punctiform suction at critical points.

Protective and hygiene measures

Wash hands before breaks and at the end of work. Take off immediately all contaminated clothing.

Wash contaminated clothing prior to re-use. Do not eat, drink, smoke or sneeze at the workplace.

Eye/face protection

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

Hand protection

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

Duration of wearing with permanent contact: 480 min

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0.7 mm.

Duration of wearing 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

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	brown
Odour:	characteristic

Test method

Changes in the physical state

Initial boiling point and boiling range:	> 250 °C
Flash point:	240 °C DIN EN ISO 2592
Ignition temperature:	> 300 °C DIN 51794
Density (at 15 °C):	0,884 g/cm ³ DIN 51757
Water solubility:	virtually insoluble
Viscosity / kinematic: (at 40 °C)	450 mm ² /s ASTM D 7042

SECTION 10: Stability and reactivity



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10.4. Conditions to avoid

Do not overheat to avoid decomposition by heat.
Refer to chapter 7 No further action is necessary.

10.5. Incompatible materials

Reacts with : Oxidizing agents, strong.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂). Sulfur oxides. Phosphorus oxides. Nitrogen oxides (NO_x). Carbon black.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Preparation related information:

Acute toxicity, oral, Rat. LD50: > 2.000 mg/kg

Test was carried out with a similar formulation.

Irritation and corrosivity

Irritant effect on the eye: mild irritant.

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

Sensitising effects

Contains: < 1% Polysulfides, Di-tert-butyl. May cause an allergic skin reaction.

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

No data available

Specific effects in experiment on an animal

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

Preparation not tested.

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not empty into drains or the aquatic environment.

12.3. Bioaccumulative potential

No data available

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

12.6. Other adverse effects

No data available

Further information

Do not allow uncontrolled leakage of product into the environment.



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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Must not be disposed of with domestic refuse. Do not empty into drains or the aquatic environment.

Waste disposal number of waste from residues/unused products

130206 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils
Classified as hazardous waste.

Contaminated packaging

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning. Packing which cannot be properly cleaned must be thrown away. Waste disposal according to official state regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: -

Inland waterways transport (ADN)

14.1. UN number: -

Marine transport (IMDG)

14.1. UN number: -

Air transport (ICAO)

14.1. UN number: -

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Other applicable information

Not a hazardous material with respect to these transportation regulations.

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

- | | |
|----|---|
| 36 | Irritating to eyes. |
| 38 | Irritating to skin. |
| 43 | May cause sensitisation by skin contact. |
| 51 | Toxic to aquatic organisms. |
| 52 | Harmful to aquatic organisms. |
| 53 | May cause long-term adverse effects in the aquatic environment. |

Full text of H statements referred to under Sections 2 and 3

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



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H411	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.

Further Information

The preparation is not dangerous in the sense of Directive 1999/45/EC.

This mixture is classified as not hazardous according to Regulation (EC) 1272/2008 [GHS].

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.)