

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 1 of 10

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

ADDINOL ECOSYNTH HEES EL 46

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

Hydraulic fluid(s) and filler(s). readily biodegradable hydraulic oils

**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 number:**

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

**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**

EUH210 Safety data sheet available on request.

**Additional advice on labelling**

According to EC directives or the corresponding national regulations the product does not have to be labelled.

**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**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 2 of 10

**Chemical characterization**

synthetic hydraulic oils Mixture based on fully synthetic esters and additives.

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
128-37-0	2,6-Di-tert-butyl-4-methylphenol			0.1 - < 0.3 %
	204-881-4		01-2119480433-40	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			

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	
128-37-0	204-881-4	2,6-Di-tert-butyl-4-methylphenol	0.1 - < 0.3 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 6000 mg/kg		

**Further Information**

The product does not contain any dangerous substances with concentrations reaching or exceeding the limits acc. to 1272/2008 [GHS].

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**

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. Use skin protection ointment after cleaning. 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. Caution if victim vomits: Risk of aspiration!

Rinse mouth immediately and drink plenty of water. In case of persistent complaints seek medical advice.

**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.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL ECOSYNTH HEES EL 46

Revision date: 09.05.2022

Product code: 767022

Page 3 of 10

#### Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Atomized water. Sand.

#### Unsuitable extinguishing media

High power water jet.

#### 5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Phosphorus oxides. 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. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Prevent spread over a wide area (e.g. by containment or oil barriers).

#### 6.3. Methods and material for containment and cleaning up

##### Other information

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. 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

Section 12: Ecological Information (non-mandatory)

Disposal: see section 13

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advice on safe handling

Work in well-ventilated zones or use proper respiratory protection. Avoid oil mist. If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid contact with skin, eyes and clothes.

##### 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 absorption of humidity. Keep container tightly closed in a cool place. Keep/Store only in original container.

##### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 4 of 10

Keep away from: Oxidizing agents.

**Further information on storage conditions**

Protect against: heat. 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****Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
128-37-0	2,6-Ditertiary-butyl-para-cresol	-	2		TWA (8 h)	

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
128-37-0	2,6-Di-tert-butyl-4-methylphenol			
Consumer DNEL, long-term		inhalation	systemic	0,435 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	0,25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,25 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1,76 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Value
128-37-0	2,6-Di-tert-butyl-4-methylphenol	
Freshwater		0,000199 mg/l
Freshwater (intermittent releases)		0,00199 mg/l
Marine water		0,00002 mg/l
Freshwater sediment		0,458 mg/kg
Marine sediment		0,046 mg/kg
Secondary poisoning		16,67 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,017 mg/l
Soil		0,054 mg/kg

**Additional advice on limit values**

Recommended limit value for oil mist

TWA: 5 mg/m<sup>3</sup>STEL: 10 mg/m<sup>3</sup>

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

**8.2. Exposure controls**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 5 of 10

**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaustion at critical locations.

**Individual protection measures, such as personal protective equipment****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**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Cosaint riospráide le scagaire i gcoinne gás orgánach agus gaile cineál A - fiuchphointe > 65 ° C: A1: <1000 ppm; A2: <5000 ppm; A3: <10,000 ppm.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	orange
Odour:	characteristic
Odour threshold:	not determined

**Test method****Changes in the physical state**

Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	not determined
Pour point:	-42 °C ASTM D 7346
Flash point:	282 °C DIN EN ISO 2592

**Flammability**

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

**Explosive properties**

No data available

Lower explosion limits:	No data available
Upper explosion limits:	No data available

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 6 of 10

Auto-ignition temperature:	No data available
<b>Self-ignition temperature</b>	
Solid:	No data available
Gas:	No data available
Decomposition temperature:	No data available
pH-Value:	not applicable
Viscosity / kinematic: (at 40 °C)	46 mm <sup>2</sup> /s ASTM D 7042
Water solubility:	virtually insoluble
<b>Solubility in other solvents</b>	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density (at 15 °C):	0,900 g/cm <sup>3</sup> DIN 51757
Relative vapour density:	No data available

**9.2. Other information**

Oxidizing properties  
No data available

Evaporation rate: No data available

**Further Information**

No 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. Acid.

**10.6. Hazardous decomposition products**

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Phosphorus oxides. 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.  
Mixture not tested.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 7 of 10

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
128-37-0	2,6-Di-tert-butyl-4-methylphenol				
	oral	LD50 > 6000 mg/kg	Rat	Study report (1989)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1988)	OECD Guideline 402

**Irritation and corrosivity**

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**

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 defatting or dermatitis.

**Aspiration hazard**

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

**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**

Mixture not tested.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 8 of 10

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
128-37-0	2,6-Di-tert-butyl-4-methylphenol					
	Acute fish toxicity	LC50 mg/l	0,199	96 h	Oryzias latipes	REACH Registration Dossier
	Acute algae toxicity	ErC50 mg/l	0,758	96 h	Pseudokirchneriella subcapitata	REACH Registration Dossier
	Acute crustacea toxicity	EC50 mg/l	0,48	48 h	Daphnia magna	REACH Registration Dossier
	Fish toxicity	NOEC mg/l	0,053	30 d	Oryzias latipes	REACH Registration Dossier
	Crustacea toxicity	NOEC mg/l	0,069	21 d	Daphnia magna	REACH Registration Dossier
	Acute bacteria toxicity	(EC50 mg/l)	> 10000	3 h	Activated sludge	Study report (2000)
						OECD Guideline 203
						OECD Guideline 201
						OECD Guideline 202
						OECD Guideline 210
						OECD Guideline 211
						OECD Guideline 209

**12.2. Persistence and degradability**

Readily biodegradable (according to OECD criteria).

**12.3. Bioaccumulative potential**

No data available

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
128-37-0	2,6-Di-tert-butyl-4-methylphenol	5,03

**BCF**

CAS No	Chemical name	BCF	Species	Source
128-37-0	2,6-Di-tert-butyl-4-methylphenol	465		REACH Registration D

**12.4. Mobility in soil**

If product enters soil, it will be mobile and may contaminate groundwater. 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.

**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****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.



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 9 of 10

**List of Wastes Code - residues/unused products**

130111 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste hydraulic oils; synthetic hydraulic oils; 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**

not applicable

**Other applicable information**

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**

This data sheet contains changes from the previous version in section(s): 1,5,6,7,9,10,11,12,16.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL ECOSYNTH HEES EL 46**

Revision date: 09.05.2022

Product code: 767022

Page 10 of 10

**Abbreviations and acronyms**

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

**Relevant H and EUH statements (number and full text)**

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

**Further Information**

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

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 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.)*