according to Regulation (EC) No 1907/2006

ADDINOL A	quaPower H	ydraulic Fluid
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

ADDINOL AquaPower Hydraulic Fluid

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

Use of the substance/mixture

Hydraulic fluid.

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 845-0	Telefax:+49 (0) 3461 845-555
e-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	
1.4. Emergency telephone	+49 (0) 3461 845 222 - Only available di	uring office hours.
numbor		

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Hazardous to the aquatic environment: Aquatic Chronic 3 Hazard Statements: Harmful to aquatic life with long lasting effects. The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard statements

H412

P273 P501 Harmful to aquatic life with long lasting effects.

Precautionary statements

Avoid release to the environment.

Dispose of contents/container to an appropriate recycling or disposal facility.

Additional advice on labelling

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

2.3. Other hazards

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

according to Regulation (EC) No 1907/2006

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Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification				
64742-56-9	Distillates (petroleum), solvent-dew	axed light paraffinic; base oil - not sp	pecified	50 - < 60 %	
	265-159-2		01-2119480132-48		
	Asp. Tox. 1; H304				
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified				
	265-157-1		01-2119484627-25		
	Asp. Tox. 1; H304				
confident	Methacrylate copolymer				
	Eye Irrit. 2; H319				
1218787-32-6	2,2'-(C16-18 (evennumbered, C18	unsaturated)-alkyl imino) diethanol		0.3 - < 0.5 %	
	620-540-6		01-2119510877-33		
	Acute Tox. 4, Skin Corr. 1C, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 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			
64742-56-9	265-159-2	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified	50 - < 60 %	
	dermal: LD50 =	= > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		
64742-54-7	265-157-1	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified	< 40 %	
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg			
1218787-32-6	620-540-6	220-540-6 2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imino) diethanol		
	oral: LD50 = 15	500 mg/kg Makut; H400: M=10		
	M chron.; H410	: M=1		

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

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.

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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.

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.

5.2. Special hazards arising from the substance or mixture

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

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

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

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.

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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.

Further information on storage conditions

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

7.3. Specific end use(s)

Gearbox oil. 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
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; b	ase oil - not specified		
Worker DNEL	, long-term	inhalation	systemic	2,73 mg/m ³
Worker DNEL	, long-term	inhalation	local	5,58 mg/m³
Worker DNEL	, long-term	dermal	systemic	0,97 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m ³
Consumer DN	EL, long-term	oral	systemic	0,74 mg/kg bw/day
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Bas	eoil - unspecified		
Worker DNEL	, long-term	inhalation	systemic	2,73 mg/m³
Worker DNEL	, long-term	inhalation	local	5,58 mg/m³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
1218787-32- 6	2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imir	no) diethanol		
Worker DNEL	, long-term	inhalation	systemic	2,112 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,745 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,214 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	0,214 mg/kg bw/day

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PNEC values

CAS No	Substance			
Environmental	Environmental compartment			
64742-56-9	Distillates (petroleum), solvent-dewaxed light paraffinic; base oil - not specified			
Secondary poi	soning	9,33 mg/kg		
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified			
Secondary poi	soning	9,33 mg/kg		
1218787-32- 6 2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imino) diethanol				
Freshwater		0,000214 mg/l		
Freshwater (in	termittent releases)	0,00087 mg/l		
Marine water		0,000021 mg/l		
Freshwater se	diment	1,692 mg/kg		
Marine sediment		0,169 mg/kg		
Secondary poisoning		2 mg/kg		
Micro-organisms in sewage treatment plants (STP)		1,5 mg/l		
Soil		5 mg/kg		

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





Appropriate engineering controls

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

Protective and hygiene measures

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.

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): 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.

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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

Physical state:	liquid		
Colour:	red		
Odour:	like: mineral oil.		
			Test method
pH-Value:		No data available	
Changes in the physical state			
Melting point:		No data available	
Boiling point or initial boiling point and boiling range:		not determined	
Pour point:		-54 °C	ASTM D 7346
Flash point:		210 °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	
Auto-ignition temperature:		not determined	
Self-ignition temperature			
Solid:		No data available	
Gas:		No data available	
Decomposition temperature:		No data available	
Oxidizing properties No data available			
Vapour pressure:		No data available	
Density (at 15 °C):		0,858 g/cm ³	DIN 51757
Water solubility:		virtually insoluble	
Solubility in other solvents No data available			
Partition coefficient n-octanol/water:		No data available	
Viscosity / kinematic: (at 100 °C)		7,4 mm²/s	ASTM D 7042
Relative vapour density:		No data available	
Evaporation rate:		No data available	

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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.

10.6. Hazardous decomposition products

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
64742-56-9	Distillates (petroleum), so	lvent-dewaxe	ed light para	ffinic; base oil - not specifi	ed		
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401	
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402	
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil - unspecified						
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401	
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402	
1218787-32- 6	2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imino) diethanol						
	oral	LD50 mg/kg	1500	Rat	Study report (1984)	OECD Guideline 425	

Irritation and corrosivity

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

Irritant effect on the eye: mild irritant.

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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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 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

SECTION 12: Ecological information

12.1. Toxicity

No data available

Mixture not tested.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
64742-56-9	Distillates (petroleum), so	lvent-dewa	ked light para	ffinic; ba	se oil - not specified			
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203	
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a	
64742-54-7	Distillates (petroleum), hy	drotreated h	neavy paraffir	nic; Base	oil - unspecified			
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203	
	Acute algae toxicity	ErC50 mg/l	>100	72 h				
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a	
1218787-32- 6	37-32- 2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imino) diethanol							
	Acute fish toxicity	LC50	0,6 mg/l	96 h	Danio rerio	Study report (1990)	OECD Guideline 203	
	Acute algae toxicity	ErC50 mg/l	0,0867	72 h	Pseudokirchneriella subcapitata	Study report (2010)	OECD Guideline 201	
	Crustacea toxicity	NOEC mg/l	0,32	21 d	Daphnia magna	Study report (2010)	OECD Guideline 211	
	Acute bacteria toxicity	(167 mg	/I)	3 h	activated sludge of a predominantly domestic sewag	Study report (2010)	OECD Guideline 209	

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

according to Regulation (EC) No 1907/2006

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Partition coefficient n-octanol/water

CAS No Chemical name					Log Pow
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsatu	3,6			
BCF	-				•
CAS No	Chemical name	BCF	Species	Source	
1218787-32-6	2,2'-(C16-18 (evennumbered, C18 unsaturated)-alkyl imino) diethanol	20,2		QSAR resu	lt (2010)

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. Endocrine disrupting properties

not applicable

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.

List of Wastes Code - residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating 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)

<u>14.1. UN number:</u>	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-
Inland waterways transport (ADN)	
<u>14.1. UN number:</u>	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-
14.4. Packing group:	-
Marine transport (IMDG)	
<u>14.1. UN number:</u>	-
14.2. UN proper shipping name:	-
14.3. Transport hazard class(es):	-

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<u>14.4. Packing group:</u>	-	
Air transport (ICAO-TI/IATA-DGR)		
<u>14.1. UN number:</u>	-	
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 m	easures for safe transport must be followed.	
14.7. Maritime transport in bulk according t	o 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 regu	lations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 3, Entry 28		
National regulatory information		
Water hazard class (D):	2 - obviously hazardous to water	
15.2. Chemical safety assessment		
Chemical safety assessments for subs	stances in this mixture were not carried out.	
SECTION 16: Other information		
Changes		
-	n the previous version in section(s): 1,3,4,7,9,11,12,16.	
Abbreviations and acronyms		
-	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
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

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

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

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our knowledge and experience. They are, however, no guarantee of any specific product properties and do not established any legally valid contractual relationship. 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.)