

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Protect Extra

Revision date: 14.01.2026

Product code: 796019

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

ADDINOL Protect Extra

UFI: 3TJ3-992T-P20S-28MY

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

Corrosion inhibitor.

1.3. Details of the supplier of the safety data sheet**Manufacturer**

Company name: ADDINOL Lube Oil GmbH
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: ETL Fluid Experts Ltd.
Street: Grimbald Crag Road
Place: GB-HG5 8PY Knaresborough, North Yorkshire
Telephone: +44 (0)1423 522911
E-mail: sales(@)etlfe.com
Internet: https://www.etlfluidexperts.com/

1.4. Emergency telephone number: +44 (0)1423 522911 - This number is serviced during office hours.**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Repr. 1B; H360D

Full text of hazard statements: see SECTION 16.

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

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

Sodium 2-ethylhexanoate

Signal word: Danger**Pictograms:****Hazard statements**

H360D May damage the unborn child.

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Precautionary statements

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

Special labelling of certain mixtures

Restricted to professional users.

Additional advice on labelling

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

2.3. Other hazards

Vapours may cause drowsiness and dizziness.
Prolonged/repetitive skin contact may cause skin defatting or dermatitis.
Do not allow to enter into surface water or drains.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
19766-89-3	Sodium 2-ethylhexanoate			< 30 %
	243-283-8		01-2119972937-17	
	Repr. 1B; H360D			
29385-43-1	Methyl-1H-benzotriazole			< 2,5 %
	249-596-6		01-2119979081-35	
	Repr. 2, Acute Tox. 4, Aquatic Chronic 2; H361d H302 H411			
288-32-4	imidazole			< 0,30 %
	206-019-2	613-319-00-0		
	Repr. 1B, Acute Tox. 4, Skin Corr. 1C; H360D H302 H314			

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	
19766-89-3	243-283-8	Sodium 2-ethylhexanoate	< 30 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2043 mg/kg	
29385-43-1	249-596-6	Methyl-1H-benzotriazole	< 2,5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = ca. 720 mg/kg	
288-32-4	206-019-2	imidazole	< 0,30 %
		oral: LD50 = ca. 970 mg/kg	

Further Information

DMSO-Extract < 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

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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. In case of persistent complaints seek medical advice.

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. Call a physician immediately.

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

Harmful if swallowed. Suspected of damaging the unborn child.

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

Treat symptomatically.

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). ketone. aldehydes.

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 jet 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). Collect in closed containers for disposal. Clean contaminated articles and floor according to the environmental legislation.

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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**

Provide adequate ventilation as well as local exhaust at critical locations. 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.
 Keep away from: Oxidizing agent

Further information on storage conditions

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

7.3. Specific end use(s)

Corrosion inhibitor. 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
19766-89-3	Sodium 2-ethylhexanoate			
Worker DNEL, long-term		inhalation	systemic	14 mg/m³
Worker DNEL, long-term		dermal	systemic	2 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	3,5 mg/m³
Consumer DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1 mg/kg bw/day
29385-43-1	Methyl-1H-benzotriazole			
Worker DNEL, long-term		inhalation	systemic	21,2 mg/m³
Worker DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,01 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,01 mg/kg bw/day

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PNEC values

CAS No	Substance	
Environmental compartment		Value
19766-89-3	Sodium 2-ethylhexanoate	
Freshwater		0,36 mg/l
Freshwater (intermittent releases)		0,493 mg/l
Marine water		0,036 mg/l
Freshwater sediment		0,301 mg/kg
Marine sediment		0,03 mg/kg
Micro-organisms in sewage treatment plants (STP)		71,7 mg/l
Soil		0,058 mg/kg
29385-43-1	Methyl-1H-benzotriazole	
Freshwater		0,008 mg/l
Freshwater (intermittent releases)		0,086 mg/l
Marine water		0,02 mg/l
Freshwater sediment		0,117 mg/kg
Marine sediment		0,292 mg/kg
Micro-organisms in sewage treatment plants (STP)		39,4 mg/l
Soil		0,0187 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**Appropriate engineering controls**

Provide adequate ventilation as well as local exhaust 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): DIN EN ISO 16321

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.

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Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection 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:	colourless
Odour:	odourless
Odour threshold:	not determined

Test method

Melting point/freezing point:	-5 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	not applicable
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value (at 20 °C):	8,1 (5%) ASTM D 1287
Water solubility:	easily soluble.
Solubility in other solvents	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density (at 20 °C):	1,058 g/cm ³ ASTM D 5931
Relative vapour density:	No data available
Particle characteristics:	No data available

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

No data available

Cloud point:

-15 °C

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.

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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: Oxidising agent, strong.

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). ketone. aldehydes.**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

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

Mixture not tested.

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
19766-89-3	Sodium 2-ethylhexanoate				
	oral	LD50 2043 mg/kg	Rat	Study report (1987)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1986)	OECD Guideline 402
29385-43-1	Methyl-1H-benzotriazole				
	oral	LD50 ca. 720 mg/kg	Rat	Study report (1983)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1984)	OECD Guideline 402
288-32-4	imidazole				
	oral	LD50 ca. 970 mg/kg	Rat	Study report (1956)	OECD Guideline 401

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: 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

May damage the unborn child. (Sodium 2-ethylhexanoate; imidazole)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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.

Aspiration hazard

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

11.2. Information on other hazards

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Endocrine disrupting properties

not applicable

SECTION 12: Ecological information

12.1. Toxicity

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

Mixture not tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
19766-89-3	Sodium 2-ethylhexanoate					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oryzias latipes	NITE (National Institute of Technology a	OECD Guideline 203
	Acute algae toxicity	ErC50 49,3 mg/l	72 h	Desmodesmus subspicatus	Study report (1988)	other: Method: other: German Industrial
	Acute crustacea toxicity	EC50 85,4 mg/l	48 h	Daphnia magna	Study report (1988)	other: Directive 79/831/EEC, Annex V, Pa
	Crustacea toxicity	NOEC 25 mg/l	21 d	Daphnia magna	Study report (1997)	OECD Guideline 211
29385-43-1	Methyl-1H-benzotriazole					
	Acute fish toxicity	LC50 55 mg/l	96 h	Cyprinodon variegatus	Study report (2003)	other: The test procedure is based on te
	Acute algae toxicity	ErC50 75 mg/l	72 h	Raphidocelis subcapitata	Study report (1994)	OECD Guideline 201
	Acute crustacea toxicity	EC50 15,8 mg/l	48 h	other aquatic crustacea: Daphnia galeata	Environ Sci Pollut Res 19:1781-1790 (201	OECD Guideline 202
	Crustacea toxicity	NOEC 18,4 mg/l	21 d	Daphnia magna	Study report (1995)	other: "Daphnia Reproduction Test" of OE
288-32-4	imidazole					
	Acute fish toxicity	LC50 > 100 - < 215 mg/l	96 h	Leuciscus idus	Study report (1989)	other: DIN 38 412
	Acute algae toxicity	ErC50 133 mg/l	72 h	Desmodesmus subspicatus	Study report (1989)	other: DIN 38412, Part 9
	Acute crustacea toxicity	EC50 341,5 mg/l	48 h	Daphnia magna	Study report (1988)	EU Method C.2
	Acute bacteria toxicity	EC50 > 1000 mg/l ()	0,5 h	activated sludge, domestic	Study report (2003)	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

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
19766-89-3	Sodium 2-ethylhexanoate	1,3
29385-43-1	Methyl-1H-benzotriazole	1,079
288-32-4	imidazole	-0,02

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12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

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.

Further information

Do not allow to enter into surface water or drains.

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

160121 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08); hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14; 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

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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****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 75

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): 2,4,5,6,8,9,10,11,12,13.

Abbreviations and acronyms

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Repr: Reproductive toxicity

Aquatic Chronic: Chronic aquatic hazard

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

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Repr. 1B; H360D	Calculation method

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Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H360D	May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.

Further Information

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

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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)