

Safety Data Sheet

ADDINOL Antifreeze CHB

Revision date: 09/20/2022

Product code: 796028

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1. Identification**Product identifier**

ADDINOL Antifreeze CHB

Recommended use of the chemical and restrictions on use**Use of the substance/mixture**

Anti-freezing agent.

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: ADDINOL Lube Oil GmbH

Street: Am Haupttor, D - 06237 Leuna

Telephone: +1 647 939 9938

e-mail: laura.nelson@addinol.de

Emergency phone number:

+16479399938 available Mon - Fri, 8:00 am to 4:30 pm EST

2. Hazard(s) identification**Classification of the chemical****Regulation (EC) No 1272/2008**

Acute Tox. 4; H302

STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

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

Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

ethanediol; ethylene glycol

Signal word: Warning**Pictograms:****Hazard statements**

H302 Harmful if swallowed

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

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P270	Do not eat, drink or smoke when using this product.
P301+P312	If swallowed: Call a poison center/doctor if you feel unwell.
P330	Rinse mouth.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

Hazards not otherwise classified

Spilled product must not leak into the ground.
Do not allow uncontrolled discharge of product into the environment.

3. Composition/information on ingredients**Mixtures****Hazardous components**

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
107-21-1	ethanediol; ethylene glycol			80 - < 100 %
	203-473-3	603-027-00-1		
	Acute Tox. 4, STOT RE 2; H302 H373			
29385-43-1	Tolyltriazole			< 0,5 %
	249-596-6			
	Repr. 2, Acute Tox. 4, Aquatic Chronic 2; H361d H302 H411			
-	Kalium (2-Benzothiazolyl)-thio-azetat			< 0,5 %
	-			
	Repr. 2, Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 3; H361 H302 H318 H412			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Components	Quantity
		Specific Conc. Limits, M-factors and ATE	
107-21-1	203-473-3	ethanediol; ethylene glycol	80 - < 100 %
		inhalation: LC50 = >2,5 mg/l (vapours); dermal: LD50 = >3500 mg/kg; oral: LD50 = 1600 mg/kg	
29385-43-1	249-596-6	Tolyltriazole	< 0,5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = ca. 720 mg/kg	
-	-	Kalium (2-Benzothiazolyl)-thio-azetat	< 0,5 %
		oral: ATE = 500 mg/kg	

Further Information

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

4. First-aid measures**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

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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, consult a physician.

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 immediately and drink plenty of water. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Ingestion causes nausea, weakness and central nervous system effects. The following symptoms may occur: Headache. drowsiness.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Foam. Extinguishing powder Carbon dioxide (CO₂)

Unsuitable extinguishing media

Strong water jet

Specific hazards arising from the chemical

In case of fire, the following may be released: Carbon monoxide Carbon dioxide (CO₂)

Special protective equipment and precautions for fire-fighters

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.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures****General advice**

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear respiratory protection when in the presence of vapor, dust, and aerosols. Avoid contact with skin, eye and clothing.

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).

Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Section 12: Ecological Information (non-mandatory)

Disposal: see section 13

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7. Handling and storage

Precautions for safe handling**Advice on safe handling**

Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Take precautionary measures against static discharges. Use only antistatically equipped (spark-free) tools.

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.

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 feed.

Keep away from: Oxidizing agents, strong.

Further information on storage conditions

storage temperature 5 - 40°C

Protect against: UV-radiation/sunlight, Frost, Heat.

Specific end use(s)

Anti-freezing agent. Further information: see technical data sheet.

8. Exposure controls/personal protection

Control parameters**Exposure limits**

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
-	Uranium soluble and insoluble compounds, as U		0.2		TWA (8 h)	ACGIH-2021
			0.6		STEL (15 min)	ACGIH-2021

DNEL/DMEL values

CAS No.	Substance	Exposure route	Effect	Value
29385-43-1	Tolyltriazole			
Worker DNEL, long-term		inhalation	systemic	21,2 mg/m ³
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
29385-43-1	Tolyltriazole	
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

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): EN 166

Hand protection

Tested protective gloves must 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. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	liquid
Color:	dark green
Odor:	characteristic
Odour threshold:	not determined

Test method

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Changes in the physical state

Melting point/freezing point:	not applicable
Boiling point or initial boiling point and boiling range:	<163 °C
Flash point:	122 °C DIN EN ISO 2719

Flammability

Solid/liquid:	not determined
Gas:	not determined

Explosive properties

Section 12: Ecological Information (non-mandatory)

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

Self-ignition temperature

Solid:	not determined
Gas:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	8,5
Viscosity / kinematic:	not applicable

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapor pressure:	not determined
Density (at 20 °C):	1,119 g/cm ³ DIN 51757
Relative vapour density:	not determined

Other information**Information with regard to physical hazard classes**Oxidizing properties
not determined**Other safety characteristics**

Evaporation rate: not determined

Further Information

not determined

10. Stability and reactivity**Reactivity**

The product is stable under storage at normal ambient temperatures.

Chemical stability

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

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

Do not overheat to avoid decomposition by heat.

Refer to chapter 7 No further action is necessary.

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Incompatible materials

Reacts with: Oxidizing agents, strong.

Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂)**11. Toxicological information****Information on toxicological effects****Acute toxicity**

Harmful if swallowed

ATEmix calculated

ATE (oral) 1641,0 mg/kg

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	LD50 1600 mg/kg	Cat		
	dermal	LD50 >3500 mg/kg	Mouse		
	inhalation (4 h) vapour	LC50 >2,5 mg/l	Rat		
29385-43-1	Tolyltriazole				
	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
-	Kalium (2-Benzothiazolyl)-thio-azetat				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

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

Sensitizing 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.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

May cause damage to organs through prolonged or repeated exposure (ethanediol; ethylene glycol)

Aspiration hazard

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

Information on other hazards**Endocrine disrupting properties**

not applicable

12. Ecological information**Ecotoxicity**

No data available

Mixture not tested.

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CAS No	Components					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
29385-43-1	Tolyltriazole					
	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	Pseudokirchneriella 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		Study report (1995)	other: "Daphnia Reproduction Test" of OE

Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Components	Log Pow
29385-43-1	Tolyltriazole	1,079

Mobility in soil

No data available

Results of PBT and vPvB assessment

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

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.

Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

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

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 disposed of.

14. Transport information**Land transport (ADR/RID)****UN number or ID number:** -**UN proper shipping name:** -**Transport hazard class(es):** -**Packing group:** -**Inland waterways transport (ADN)****UN number or ID number:** -**UN proper shipping name:** -

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Transport hazard class(es): -**Packing group:** -**Marine transport (IMDG)****UN number or ID number:** -**UN proper shipping name:** -**Transport hazard class(es):** -**Packing group:** -**Air transport (ICAO-TI/IATA-DGR)****UN number or ID number:** -**UN proper shipping name:** -**Transport hazard class(es):** -**Packing group:** -**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Other applicable information

No dangerous good in sense of these transport regulations.

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Chemical Safety Assessment

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

16. Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,5,7,9,12.

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

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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 GHS

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
STOT RE 2; H373	Calculation method

Relevant H statements (full text)

H302	Harmful if swallowed
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Other data

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