



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## ADDINOL Antifreeze

Revision date: 14.01.2021

Product code: 796006

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### 2.3. Other hazards

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

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
107-21-1	Ethylene glycol			< 80 %
	203-473-3		01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			
19766-89-3	Sodium 2-ethylhexanoate			< 3 %
	243-283-8			
	Repr. 2; H361d			

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

#### Further Information

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. In case of breathing difficulties administer oxygen. 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 immediately and drink plenty of water. Call a physician immediately.

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

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

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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**Suitable extinguishing media**Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>).**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>). 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/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**

High slip hazard because of leaking or spilled product. Remove all sources of ignition. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Avoid contact with skin, eye and clothing.

**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**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed containers for 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**

Keep away from sources of ignition - No smoking. The following must be prevented: inhalation. Provide adequate ventilation as well as local exhaust at critical locations. Wear personal protection equipment. Avoid contact with skin, eye and clothing.

**Advice on protection against fire and explosion**

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Take precautionary measures against static discharges. Use only antistatically equipped (spark-free) tools.

**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 agents, strong.

**Further information on storage conditions**

storage temperature 5 - 40°C  
Protect against: UV-radiation/sunlight, Frost

**7.3. Specific end use(s)**

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

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### 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
56-81-5	(OLD) Glycerol, mist	-	10		TWA (8 h)	
107-21-1	1,2-Dihydroxyethane, particulate	-	10		TWA (8 h)	

##### Additional advice on limit values

source:

#### 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): DIN EN 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:	blue
Odour:	characteristic

#### Test method

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pH-Value:	8,4
<b>Changes in the physical state</b>	
Melting point:	not determined
Initial boiling point and boiling range:	180 °C estimated
Flash point:	122 °C DIN EN ISO 22719
<b>Flammability</b>	
Solid:	not determined
Gas:	not determined
<b>Explosive properties</b>	
not determined	
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined
<b>Auto-ignition temperature</b>	
Solid:	not determined
Gas:	not determined
Decomposition temperature:	not determined
<b>Oxidizing properties</b>	
not determined	
Vapour pressure:	not determined
Density (at 20 °C):	1,132 g/cm <sup>3</sup> DIN 51757
Water solubility:	easily soluble.
<b>Solubility in other solvents</b>	
not determined	
Partition coefficient:	not determined
Viscosity / kinematic: (at 40 °C)	not applicable
Vapour density:	not determined
Evaporation rate:	not determined

#### **9.2. Other 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**

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.

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#### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>). ketone. aldehydes.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

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

Acute oral toxicity LD50: 2067 mg/kg (estimated)

##### ATEmix calculated

ATE (oral) 1111,1 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	Ethylene glycol				
	oral	LD50 1600 mg/kg	Cat		
	dermal	LD50 >3500 mg/kg	Mouse		
	inhalation (4 h) vapour	LC50 >2,5 mg/l	Rat		

##### Irritation and corrosivity

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

Irritant effect on the skin: Not an irritant.

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

##### 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

May cause damage to organs through prolonged or repeated exposure. (Ethylene glycol)

##### Aspiration hazard

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

##### Specific effects in experiment on an animal

No data available

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data available

Mixture not tested.

#### 12.2. Persistence and degradability

Product is partially biodegradable.

#### 12.3. Bioaccumulative potential

No data available

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

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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 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**

160104 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); end-of-life vehicles; 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:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

#### **Inland waterways transport (ADN)**

- 14.1. UN number:** -  
**14.2. UN proper shipping name:** -  
**14.3. Transport hazard class(es):** -  
**14.4. Packing group:** -

#### **Marine transport (IMDG)**

- 14.1. UN 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:** -  
**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.

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**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

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): 1,2,3,4,5,6,7,8,9,10,11,12,13,14,16.

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

H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

**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 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.)*