



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 1 of 9

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

ADDINOL Screen Wash -60°C

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

##### Use of the substance/mixture

Anti-freeze and de-icing products. Cleaning agent.

#### 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 845-201	Telefax: +49 (0) 3461 845-561
e-mail:	info@addinol.de	
Contact person:	Application Technology	
Internet:	www.addinol.de	
Responsible Department:	ADDINOL Application Technology	

#### 1.4. Emergency telephone number:

+49 (0) 3461 845-201 - This number is serviced during office hours.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Directive 67/548/EEC or 1999/45/EC

R phrases:  
Flammable.

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:  
Flammable liquid: Flam. Liq. 3  
Hazard Statements:  
Flammable liquid and vapour.

#### 2.2. Label elements

Signal word:	Warning
Pictograms:	GHS02



##### Hazard statements

H226	Flammable liquid and vapour.
------	------------------------------

##### Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P243	Take precautionary measures against static discharge.
P370+P378	In case of fire: Use Extinguishing powder to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 2 of 9

P501

Dispose of contents/container to a waste disposal system.

#### 2.3. Other hazards

Inhalation causes narcotic effects/intoxication. Diminished responsiveness. The product is skin resorptive. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Keep in a cool, well-ventilated place.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
200-578-6	ethanol, ethyl alcohol	
64-17-5	F - Highly flammable R11	50 - 60 %
603-002-00-5	Flam. Liq. 2; H225	
203-473-3	Ethylene glycol	< 10 %
107-21-1	Xn - Harmful R22	
	Acute Tox. 4, STOT RE 2; H302 H373	
01-2119456816-28		

Full text of R-, H- and EUH-phrases: 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

Inhalation causes narcotic effects/intoxication.

Move victim to fresh air. Put victim at rest and keep warm. In case of breathing difficulties administer oxygen. If victim is at risk of losing consciousness, position and transport on their side.

##### 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. Call a physician immediately.

Never give anything by mouth to an unconscious person or a person with cramps.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 3 of 9

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

Vapours may cause drowsiness and dizziness.

#### **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. Atomized water.

##### **Unsuitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>).

#### **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>). carbon black.

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit.

#### **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**

Remove all sources of ignition. The following must be prevented: inhalation. Provide adequate ventilation as well as local exhaust at critical locations. Wear personal protection equipment.

#### **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 objects and areas thoroughly observing environmental regulations.

#### **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 vapours are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars. 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.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 4 of 9

#### 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.

##### Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents, strong.

##### Further information on storage conditions

Protect against direct sunlight.

Recommended storage temperature: 10 - 30°C

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

Refrigerant. Further information: see technical data sheet.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

##### Additional advice on limit values

source:

#### 8.2. Exposure controls



##### Appropriate engineering controls

Provide adequate ventilation as well as local exhaust 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



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 5 of 9

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. Filter against organic vapours (type A). 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:	blue
Odour:	lemon.

#### Test method

pH-Value (at 20 °C):	6,5	DIN 51369
<b>Changes in the physical state</b>		
Melting point:	-55 °C	ASTM D 1177
Initial boiling point and boiling range:	78 °C	
Flash point:	24 °C	DIN 51755
Lower explosion limits:	3,5 vol. %	
Upper explosion limits:	15 vol. %	
Ignition temperature:	425 °C	DIN 51794
Density (at 20 °C):	0,925 g/cm <sup>3</sup>	DIN 51757
Water solubility:	easily soluble.	
Viscosity / kinematic:	not applicable	
Solvent content:	35%	

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable with proper care and handling.

### 10.2. Chemical stability

The product is chemically stable when handled and stored under normal conditions.

### 10.3. Possibility of hazardous reactions

No decomposition if used as intended.

### 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

Oxidizing agents, strong.

### 10.6. Hazardous decomposition products

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). carbon black.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Screen Wash -60°C**

Print date: 19.05.2015

Product code: 796030

Page 6 of 9

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Mixture related information:

Acute toxicity, oral, Rat LD50: 10470 mg/kg (estimated)

Acute toxicity, dermal, Rat LD50: &gt; 2.0000 mg/kg (estimated)

Acute toxicity, inhalant, Rat LC50: 125 mg/l (4h)

Test was carried out with a similar formulation.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64-17-5	ethanol, ethyl alcohol				
	oral	LD50	6200 mg/kg	Rat	IUCLID
	inhalative (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS
107-21-1	Ethylene glycol				
	oral	ATE	500 mg/kg		

**Irritation and corrosivity**

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**

Evaluation: no danger of sensitization.

**Severe effects after repeated or prolonged exposure**

Inhalation causes narcotic effects/intoxication. Vapours may cause drowsiness and dizziness.

Diminished responsiveness. The product is skin resorptive.

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

No data available

**Specific effects in experiment on an animal**

No data available

**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**

Pimephales promelas LC50: 15300 mg/l (96h)

Ceriodaphnia spec EC50: 5012 mg/l (48h)

Chlorella vulgaris EC50: 675 mg/l (96h)

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Screen Wash -60°C**

Print date: 19.05.2015

Product code: 796030

Page 7 of 9

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
64-17-5	ethanol, ethyl alcohol					
	Acute crustacea toxicity	EC50 mg/l	9268 - 14221	48 h	Daphnia magna	IUCLID

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

**12.4. Mobility in soil**

No data available

**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. 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****Advice on disposal**

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

**Waste disposal number of waste from residues/unused products**

070101 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; aqueous washing liquids and mother liquors  
Classified as 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:** UN1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Special Provisions: 274 601



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## ADDINOL Screen Wash -60°C

Print date: 19.05.2015

Product code: 796030

Page 8 of 9

Limited quantity: 5 L  
Transport category: 3  
Hazard No: 30  
Tunnel restriction code: D/E

### Other applicable information (land transport)

Quantities released: E1

### Inland waterways transport (ADN)

**14.1. UN number:** UN1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Special Provisions: 274 601  
Limited quantity: 5 L

### Other applicable information (inland waterways transport)

Quantities released: E1

### Marine transport (IMDG)

**14.1. UN number:** UN1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Special Provisions: 223, 274  
Limited quantity: 5 L  
EmS: F-E, S-D

### Other applicable information (marine transport)

Quantities released: E1

### Air transport (ICAO)

**14.1. UN number:** UN1987  
**14.2. UN proper shipping name:** ALCOHOLS, N.O.S.  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Special Provisions: A3 A180  
Limited quantity Passenger: 10 L  
IATA-packing instructions - Passenger: 355



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Screen Wash -60°C**

Print date: 19.05.2015

Product code: 796030

Page 9 of 9

IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L

**Other applicable information (air transport)**

Quantities released: E1  
Passenger LQ: Y344

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

Warning: flammable liquids.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 1 - slightly water contaminating

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Relevant R-phrases (Number and full text)**

11	Highly flammable.
22	Harmful if swallowed.

**Relevant H- and EUH-phrases (Number and full text)**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

**Further Information**

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

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.)*