



Safety Data Sheet

according to Regulation (EC) No 1907/2006

ADDINOL Penta-Cool NM 22

Print date: 17.09.2015

Product code: 770055

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

1.1. Product identifier

ADDINOL Penta-Cool NM 22

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

Use of the substance/mixture

Metal working fluids.

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 number: +49 (0) 3461-845201 - This number is serviced during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Hazard categories:

Aspiration hazard: Asp. Tox. 1

Hazard Statements:

May be fatal if swallowed and enters airways.

2.2. Label elements

Hazardous components which must be listed on the label

Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics

Signal word: Danger

Pictograms: GHS08



Hazard statements

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container to a waste disposal system.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.



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Additional advice on labelling

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

2.3. Other hazards

Harmful by inhalation and if swallowed.

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

Do not allow uncontrolled leakage of product into the environment.

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		
920-901-0	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	> = 90 %
90622-58-5	Xn - Harmful R65-66	
	Asp. Tox. 1; H304	
01-2119456810-40		

Full text of R-, H- and EUH-phrases: see section 16.

Further Information

DMSO-Extrakt < 3 %, IP 346.

Concentration of PCBs < 1mg/kg.

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

Provide fresh air. In case of breathing difficulties administer oxygen. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Seek medical attention if problems persist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all 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. Medical treatment necessary.

Caution if victim vomits: Risk of aspiration!

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

after ingestion: Coughing. shortage of breath. Vomiting. fever.

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



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Treat symptomatically. Where appropriate artificial ventilation. Regulation of the blood circulation, possible shock treatment. Subsequent observance for pneumonia and lung oedema.

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). Nitrogen oxides (NO_x). carbon black.

5.3. Advice for firefighters

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

Additional information

@0505.B005096 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. Keep away from sources of ignition. - No smoking. 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). Treat the recovered material as prescribed in the section on waste 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

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, eye and clothing.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. 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.

Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.



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Keep away from: Oxidizing agents.

Further information on storage conditions

Keep away from sources of ignition. - No smoking.

Protect against: UV-radiation/sunlight. frost.

Recommended storage temperature: 5 - 40°C

7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Recommended limit value for cooling lubricants (steam and aerosol)

MAK: 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 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). CR (polychloroprenes, Chloroprene rubber).

Thickness of glove material: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber). CR (polychloroprenes, Chloroprene 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



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic

Test method

Changes in the physical state

Initial boiling point and boiling range:	180 °C
Pour point:	-5 °C ASTM D 7346
Flash point:	69 °C DIN EN ISO 2592
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	6,5 vol. %
Ignition temperature:	> 220 °C DIN 51794
Vapour pressure: (at 37 °C)	5 hPa
Density (at 20 °C):	0,766 g/cm ³ DIN 51757
Water solubility:	insoluble
Viscosity / kinematic: (at 40 °C)	1,8 mm ² /s DIN EN ISO 3104

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

Keep away from sources of ignition. - No smoking.

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). Nitrogen oxides (NO_x). carbon black.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data available

Mixture not tested.

ATEmix calculated

ATE (inhalative vapour) 5,56 mg/l

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
90622-58-5	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics				
	oral	LD50	> 5000 mg/kg	Rat	
	dermal	LD50	> 5000 mg/kg	Rat	
	inhalative (4 h) vapour	LC50	> 5 mg/l	Rat	

Irritation and corrosivity

Irritant effect on the eye: Not an irritant.

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

Sensitising effects

Evaluation: no danger of sensitization.

Severe effects after repeated or prolonged exposure

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

Practical experience**Observations relevant to classification**

Aspiration hazard: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information**12.1. Toxicity**

No data available

Mixture not tested.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
90622-58-5	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics					
	Acute fish toxicity	LC50	> 1000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	> 1000 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h	Daphnia magna	

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

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. Other adverse effects

No data available



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Further information

Do not allow uncontrolled leakage of product into the environment.

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

120107 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; mineral-based machining oils free of halogens (except emulsions and solutions) 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: -

Inland waterways transport (ADN)

14.1. UN number: -

Marine transport (IMDG)

14.1. UN number: -

Air transport (ICAO)

14.1. UN number: -

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. Transport in bulk according to Annex II of MARPOL73/78 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 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)

65 Harmful: may cause lung damage if swallowed.



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66 Repeated exposure may cause skin dryness or cracking.

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

H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

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.)