according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

ADDINOL Penta-Cool NM 12

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 +49 (0) 3461 845 222 - Only available during office hours.

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Aspiration hazard: Asp. Tox. 1

Hazard Statements:

May be fatal if swallowed and enters airways.

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

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Distillates (petroleum), hydrotreated light naphthenic

Signal word: Danger

Pictograms:



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.

Additional advice on labelling

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

2.3. Other hazards

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

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Do not allow uncontrolled leakage of product into the environment.

Harmful if swallowed.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	Classification according to Regulation (EC) No. 1272/2008 [CLP]				
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic			70- 90 %	
	265-156-6		01-2119480375-34		
	Asp. Tox. 1; H304				
4259-15-8	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)			< 1 %	
	224-235-5		01-2119493635-27		
	Eye Dam. 1, Aquatic Chronic 2; H318 H411				

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

Further Information

DMSO-Extrakt < 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

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. Symptoms can occur only after several hours.

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

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

according to Regulation (EC) No 1907/2006

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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 (NOx). carbon black.

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). Treat the recovered material as prescribed in the section on waste 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

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 absorbtion 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.

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.

according to Regulation (EC) No 1907/2006

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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 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). 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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellow

Odour: like: mineral oil.

Test method

pH-Value: No data available

Changes in the physical state

Melting point: -20 °C

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Initial boiling point and boiling range: > 200 °C

Flash point: 150 °C DIN EN ISO 2592

Flammability

Solid: No data available
Gas: No data available

Explosive properties

not Explosive.

Lower explosion limits: 0,6 vol. %
Upper explosion limits: 6,5 vol. %
Ignition temperature: > 240 °C

Auto-ignition temperature

Solid: No data available
Gas: No data available
Decomposition temperature: No data available

Oxidizing properties

Not oxidising.

Vapour pressure: No data available

Density (at 20 °C): 0,91 g/cm³ DIN EN ISO 12185

Water solubility: insoluble

Solubility in other solvents

No data available

Partition coefficient: No data available

Viscosity / kinematic: 12 mm²/s DIN EN ISO 3104

(at 40 °C)

Vapour density:

Evaporation rate:

No data available

No data available

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

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 (NOx). carbon black.

according to Regulation (EC) No 1907/2006

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Mixture not tested.

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic						
	oral	LD50 mg/kg	> 5000	Rat			
	dermal	LD50 mg/kg	> 2000	Rabbit			
4259-15-8	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)						
	oral	LD50 mg/kg	3100	Rat			
	dermal	LD50 mg/kg	5000	Rabbit			

Irritation and corrosivity

Irritant effect on the eye: mild irritant.

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

Sensitising effects

Evaluation: no danger of sensitization.

STOT-repeated exposure

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

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	Dose		[h] [d]	Species	Source	Method
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic						
	Acute fish toxicity	LC50 mg/l	> 100	96 h			
	Acute algae toxicity	ErC50 mg/l	> 100				
4259-15-8	Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)						
	Acute fish toxicity	LC50 mg/l	1 - 10		Carassius auratus (goldfish)		
	Acute algae toxicity	ErC50	240 mg/l	96 h			

12.2. Persistence and degradability

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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

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): 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)	
<u>14.1. UN number:</u>	-
14.2. UN proper shipping name:	-

14.3. Transport hazard class(es):

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

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 28: Distillates (petroleum), hydrotreated light naphthenic

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

Changes

This data sheet contains changes from the previous version in section(s): 1,3,5,8,9,10,11,12,14,15,16.

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

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].

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 singulary 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.)