## Safety Data Sheet

## ADDINOL Penta-Cool NM 10

Print date: $\mathbf{2 2} .06 .2015$
Product code: 770052

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

### 1.1. Product identifier <br> ADDINOL Penta-Cool NM 10

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:

Street:
Place:
Telephone:
e-mail:
Contact person:
Internet:
Responsible Department:

### 1.4. Emergency telephone number:

ADDINOL Lube Oil GmbH
Gebäude 4609
Am Haupttor
D-06237 Leuna
+49 (0) 3461 845-0 Telefax: +49 (0) 3461 845-555
info@addinol.de
Application Technology
www.addinol.de
ADDINOL Application Technology
+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
Hazardous to the aquatic environment: Aquatic Chronic 4
Hazard Statements:
May be fatal if swallowed and enters airways.
May cause long lasting harmful effects to aquatic life .

### 2.2. Label elements

Hazardous components which must be listed on the label
Hydrocarbons, C11-C12, isoalkanes, $<2 \%$ aromatics
Hydrocarbons, C11-C13, isoalkanes, $<2 \%$ aromatics
Hydrocarbons, C11-C14, isoalkanes, cyclics, $<2 \%$ aromatics
Signal word:
Danger
Pictograms:
GHS08


Hazard statements
H304 May be fatal if swallowed and enters airways.
H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements
P273
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

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| 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.

## Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

### 2.3. Other hazards

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## Chemical characterization

## 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 |  |  |
| 918-167-1 | Hydrocarbons, C11-C12, isoalkanes, $<2 \%$ aromatics | < $65 \%$ |
|  | Xn - Harmful R53-65-66 |  |
|  | Asp. Tox. 1, Aquatic Chronic 4; H304 H413 EUH066 |  |
| 01-2119472146-39 |  |  |
| 920-901-0 | Hydrocarbons, C11-C13, isoalkanes, $<2 \%$ aromatics | < $30 \%$ |
|  | Xn - Harmful R65-66 |  |
|  | Asp. Tox. 1; H304 EUH066 |  |
| 01-2119456810-10 |  |  |
| 927-285-2 | Hydrocarbons, C11-C14, isoalkanes, cyclics, < 2\% aromatics | < $30 \%$ |
|  | Xn - Harmful R65-66 |  |
|  | Asp. Tox. 1; H304 EUH066 |  |
| 01-2119480162-45 |  |  |

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

## Further Information

DMSO-Extrakt < 3 \%, IP 346.
Concentration of PCBs $<1 \mathrm{mg} / \mathrm{kg}$.
Classification system: The classification corresponds to the current EC lists and is completed by information from specialist literature and company information.

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## 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. Seek medical attention if problems persist.
After contact with skin
After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin. 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.
Caution if victim vomits: Risk of aspiration!
Rinse mouth thoroughly with water. Medical treatment necessary.
4.2. Most important symptoms and effects, both acute and delayed after ingestion: Coughing. shortage of breath.

### 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

### 5.1. Extinguishing media

Suitable extinguishing media
Foam. Extinguishing powder. Carbon dioxide (CO2). Atomized water. Water fog.
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.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. 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

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6.1. Personal precautions, protective equipment and emergency procedures

High slip hazard because of leaking or spilled product. Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothes. Wear personal protection equipment. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols.
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. Use only antistatically equipped (spark-free) tools. Avoid contact with skin, eye and clothing.
Advice on protection against fire and explosion
Take precautionary measures against static discharges. Keep away from sources of ignition. - No smoking.

### 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. Provide adequate ventilation as well as local exhaustion at critical locations. Take precautionary measures against static discharges.
Advice on storage compatibility
Keep away from food, drink and animal feedingstuffs.
Keep away from: Oxidizing agents.
Further information on storage conditions
Protect against: UV-radiation/sunlight. frost.
Recommended storage temperature: $10-30^{\circ} \mathrm{C}$

### 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
Exposure limit values:
de-aromatised hydrocarbon mixtures (group 1): $200 \mathrm{ml} / \mathrm{m}^{3}$ (TRGS 900)

### 8.2. Exposure controls

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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: 0.4 mm .

Wearing time with occasional contact (splashes): 30 min
Suitable material: NBR (Nitrile rubber).
Thickness of glove material: 0.2 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 > $65^{\circ} \mathrm{C}: \mathrm{A} 1$ : < 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: colourless
Odour: characteristic

## Test method

## Changes in the physical state

Initial boiling point and boiling range:
Flash point:
Ignition temperature:
Density (at $20^{\circ} \mathrm{C}$ ):
Water solubility:
Viscosity / kinematic:
$61{ }^{\circ} \mathrm{C}$ DIN EN ISO 2719
$>200^{\circ} \mathrm{C}$ DIN 51794
$0,765 \mathrm{~g} / \mathrm{cm}^{3}$ DIN 51757
virtually insoluble
$1,9 \mathrm{~mm}^{2} / \mathrm{s}$ DIN 51562

SECTION 10: Stability and reactivity

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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

This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition
(e.g. static electricity, pilot lights, or mechanical/electrical equipment).

Do not overheat to avoid decomposition by heat.
10.5. Incompatible materials

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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

## ATEmix tested

|  | Dose | Species | Source |
| :--- | :--- | :--- | :--- |
| LD50, oral | $>5.000 \mathrm{mg} / \mathrm{kg}$ | Rat | OECD 401 |
| LD50, dermal | $>5.000 \mathrm{mg} / \mathrm{kg}$ | Rabbit | OECD 402 |

## Irritation and corrosivity

Irritant effect on the eye: Not an irritant.
Irritant effect on the skin: Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

## Sensitising effects

Evaluation: no danger of sensitization.
Severe effects after repeated or prolonged exposure
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.
Carcinogenic/mutagenic/toxic effects for reproduction
No indications of human reproductive toxicity exist. No indications of human germ cell mutagenicity exist.
Specific effects in experiment on an animal
No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

Preparation related information
Daphnia magna: ELO $1000 \mathrm{mg} / \mathrm{L}(48 \mathrm{~h})$
Pseudokirchneriella subcapitata: EL0 $1000 \mathrm{mg} / \mathrm{L}$ (72 h)
Pseudokirchneriella subcapitata: NOELR $1000 \mathrm{mg} / \mathrm{L}$ (72 h)
Oncorhynchus mykiss (Rainbow trout): LLO 1000 mg/L (96 h)
The statement is derived from products of similar structure or composition.

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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
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.
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 <br> EU regulatory information

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according to Regulation (EC) No 1907/2006

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2004/42/EC (VOC):

## National regulatory information

Water contaminating class (D):
Water conting class (D):
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)
53 May cause long-term adverse effects in the aquatic environment.
65 Harmful: may cause lung damage if swallowed.
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. |
| :--- | :--- |
| H413 | May cause long lasting harmful effects to aquatic life. |
| 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 contructual 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.)

