

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**ADDINOL Penta-Cool NM 21**

Revision date: 09.07.2025

Product code: 770054

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

ADDINOL Penta-Cool NM 21

UFI: GKNS-F6D9-Y204-HD4T

**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****Manufacturer**

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	

**Supplier**

Company name:	GEM OILS LIMITED	
Place:	IRL-H12K298 Regaskin Co. Cavan	
Telephone:	+353 49 4378116	Telefax: +353 49 4368329
E-mail:	sales@gemoils.ie	
Contact person:	GEM OILS LIMITED	Telephone: +353 49 4378116
E-mail:	sales@gemoils.ie	
Internet:	https://gemoils.ie/	

**1.4. Emergency telephone number:**

Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Asp. Tox. 1; H304

Full text of hazard statements: see SECTION 16.

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

Hydrocarbons, C11-C13, isoalkanes, &lt; 2% aromatics

**Signal word:** Danger**Pictograms:****Hazard statements**

H304 May be fatal if swallowed and enters airways.

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**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 industrial incineration plant.

**Additional advice on labelling**

Product is classified and labelled in accordance with EC regulations or the 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****Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics			> 85 - < 90 %
	920-901-0		01-2119456810-10	
	Asp. Tox. 1; H304 EUH066			

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

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
246538-78-3	920-901-0	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	> 85 - < 90 %
	dermal: LD50 = > 2200 - 2500 mg/kg; oral: LD50 = > 5000 mg/kg		

**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**

Provide fresh air. In case of breathing difficulties administer oxygen. Seek medical attention if problems persist.

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Remove/ 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!

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### 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

First Aid, decontamination, treatment of symptoms.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>). 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 (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). 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 jet 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

#### General advice

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, eyes and clothes.

### 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

#### Other information

Absorb with liquid-binding material (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. Ventilate affected area.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Section 12: Ecological Information (non-mandatory)

Disposal: see section 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. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

#### 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.

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### Advice on general occupational hygiene

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.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep/Store only in original container. Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Keep container tightly closed in a cool place.

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.  
Keep away from: Oxidizing agent.

#### Further information on storage conditions

Protect against: UV-radiation/sunlight. frost. heat.  
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/m<sup>3</sup>

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2. Exposure controls



#### Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN ISO 16321

##### Hand protection

Tested protective gloves are to be worn: German Industry Norms (DIN) / European Norms (EN): EN ISO 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.

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#### 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:	colourless - light yellow	
Odour:	characteristic	
Odour threshold:	not determined	
		<b>Test method</b>
Melting point/freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	180 °C	
Flammability:	No data available	
Lower explosion limits:	0,6 vol. %	
Upper explosion limits:	6,5 vol. %	
Flash point:	76 °C	DIN EN ISO 2592
Auto-ignition temperature:	> 230 °C	DIN 51794
Decomposition temperature:	No data available	
pH-Value:	not applicable	
Viscosity / kinematic: (at 40 °C)	1,70 mm <sup>2</sup> /s	DIN EN ISO 3104
Water solubility:	insoluble	
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:	No data available	
Vapour pressure:	No data available	
Density (at 15 °C):	0,780 g/cm <sup>3</sup>	DIN EN ISO 12185
Relative vapour density:	No data available	
Particle characteristics:	No data available	

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties

not Explosive.

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

Not oxidising.

##### Other safety characteristics

Evaporation rate:

No data available

Pour point:

-5 °C ASTM D 7346

### 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.

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**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 : Oxidising agent, strong.

**10.6. Hazardous decomposition products**

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

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

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

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1995)	OECD Guideline 401
	dermal	LD50 > 2200 - 2500 mg/kg	Rabbit	Study report (1961)	Standard acute method, applying 4 differ

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

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

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

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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**

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

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

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**11.2. Information on other hazards****Endocrine disrupting properties**

not applicable

**SECTION 12: Ecological information**

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#### 12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics					
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Raphidocelis subcapitata	REACH Registration Dossier
	Fish toxicity	NOEC mg/l	0,217	28 d	Oncorhynchus mykiss	REACH Registration Dossier
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	REACH Registration Dossier
						OECD Guideline 201
						The aquatic toxicity was estimated by a
						OECD Guideline 211

#### 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

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	>= 1,99

#### BCF

CAS No	Chemical name	BCF	Species	Source
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	>= 6,91	calculated	REACH Registration D

#### 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 substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### Further information

Do not allow uncontrolled leakage of product into the environment.

### 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

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

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

**Marine transport (IMDG)**

- 14.1. UN number or ID 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 or ID 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.

**14.7. Maritime transport in bulk according to IMO instruments**

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 3

**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): 2,3,6,7,8,9,11,12.

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**Abbreviations and acronyms**

Asp. Tox: Aspiration hazard

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road ; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ; ASTM - American Society for the Testing of Materials ; ATE - Acute Toxicity Estimates ; bw - Body weight ; CAO - Cargo Aircraft Only ; CAS - Chemical Abstracts Service ; CMR - Carcinogen, Mutagen or Reproductive Toxicant ; DIN - Standard of the German Institute for Standardisation ; DNEL - Derived No-Effect Level ; DOT - Department of Transportation ; DSL - Domestic Substances List (Canada) ; EG - European Union ; EN - European standards ; GHS - Globally Harmonized System ; GLP - Good Laboratory Practice ; HMIS - Hazardous Materials Identification System ; IARC - International Agency for Research on Cancer ; IATA - International Air Transport Association ; IC50 - Half maximal inhibitory concentration ; ICAO - International Civil Aviation Organization ; IMDG - International Maritime Dangerous Goods ; IMO - International Maritime Organization ; ISO - International Organisation for Standardization ; LC50 - Lethal Concentration to 50 % of a test population ; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose) ; MARPOL - International Convention for the Prevention of Pollution from Ships ; MSHA - Mine Safety and Health Administration ; n;0;s; - Not Otherwise Specified ; NFPA - National Fire Protection Association ; NO(A)EC - No Observed (Adverse) Effect Concentration ; NO(A)EL - No Observed (Adverse) Effect Level ; NOELR - No Observable Effect Loading Rate ; NTP - National Toxicology Program ; OECD - Organization for Economic Co-operation and Development ; PBT - Persistent, Bioaccumulative and Toxic substance ; (Q)SAR - (Quantitative) Structure Activity Relationship ; RCRA - Resource Conservation and Recovery Act ; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals ; RID - Regulation concerning the International Carriage of Dangerous Goods by Rail ; RQ - Reportable Quantity ; SADT - Self- Accelerating Decomposition Temperature ; SARA - Superfund Amendments and Reauthorization Act ; SDS - Safety Data Sheet ; TSCA - Toxic Substances Control Act (United States) ; UN - United Nations ; vPvB - Very Persistent and Very Bioaccumulative

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method

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

H304 May be fatal if swallowed and enters airways.  
 EUH066 Repeated exposure may cause skin dryness or cracking.

**Further Information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*