

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ADDINOL Penta-Cool NM 63

Revision date: 21.02.2023

Product code: 770039

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

ADDINOL Penta-Cool NM 63

UFI: 59MS-V61C-C20Q-K8DU

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**

Eye Irrit. 2; H319

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****Signal word:** Warning**Pictograms:****Hazard statements**

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands thoroughly after handling.

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- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.

Additional advice on labelling

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

2.3. Other hazards

- Prolonged/repetitive skin contact may cause skin defatting or dermatitis.
Spilled product must not leak into the ground.
Do not allow uncontrolled leakage of product into the environment.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum	60 - < 80 %
	265-169-7	
	01-2119471299-27	
	Asp. Tox. 1; H304	
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts	< 2,50 %
	270-478-5	
	01-2119948548-22	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2; H315 H318 H411	

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	
64742-65-0	265-169-7	Solvent, dewaxed heavy paraffinic petroleum	60 - < 80 %
		dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
68442-22-8	270-478-5	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts	< 2,50 %
		dermal: LD50 = > 2002 mg/kg; oral: LD50 = > 2000 - < 5000 mg/kg	

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

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. Change contaminated clothing. In case of skin irritation, seek medical treatment.

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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. Call a physician immediately.

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

No information available.

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

Carbon dioxide (CO₂). Extinguishing powder. Water spray. Foam.

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). Sulfur oxides. Nitrogen oxides (NO_x). Phosphorus oxides. 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

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.

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

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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, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

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

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents, strong.

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

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m ³
Worker DNEL, long-term		inhalation	local	5,58 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts			
Worker DNEL, long-term		inhalation	systemic	8,05 mg/m ³
Worker DNEL, long-term		dermal	systemic	11,4 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	5,71 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,24 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum	
Secondary poisoning		9,33 mg/kg
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts	
Freshwater		0,004 mg/l
Freshwater (intermittent releases)		0,045 mg/l
Marine water		0,0046 mg/l
Freshwater sediment		0,045 mg/kg
Marine sediment		0,005 mg/kg
Secondary poisoning		10,67 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,007 mg/kg

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): EN 166

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).

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

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. 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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light yellow
Odour:	like: mineral oil.
Odour threshold:	not determined

	Test method
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	> 250 °C
Flammability:	No data available
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	6,5 vol. %
Flash point:	210 °C DIN EN ISO 2592
Auto-ignition temperature:	> 240 °C
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic: (at 40 °C)	30 mm ² /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 20 °C):	0,880 g/cm ³ DIN EN ISO 12185
Relative vapour density:	No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

No data available

Pour point:

-13 °C

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

Exothermic reactions with: Acid.

10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.

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Do not overheat to avoid decomposition by heat.

10.5. Incompatible materials

Reacts with : Oxidizing agents, strong. Acid.

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂). Sulfur oxides. Nitrogen oxides (NO_x). Phosphorus oxides. carbon black.**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.
Mixture not tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 > 5000 mg/kg	Rabbit	Study report (1982)	OECD Guideline 402
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts				
	oral	LD50 > 2000 - < 5000 mg/kg	Rat	Study report (1983)	other: Section 1500.3 – Federal Hazardou
	dermal	LD50 > 2002 mg/kg	Rat	Study report (1985)	OECD Guideline 402

Irritation and corrosivityCauses serious eye irritation.
Skin corrosion/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

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 exposureBased on available data, the classification criteria are not met.
Prolonged/repetitive skin contact may cause skin defatting or dermatitis.**Aspiration hazard**

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

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

not applicable

SECTION 12: Ecological information**12.1. Toxicity**Based on available data, the classification criteria are not met.
Mixture not tested.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum					
	Acute fish toxicity	LL50 > 100 mg/l	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna		
	Fish toxicity	NOEC >= 1000 mg/l	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts					
	Acute fish toxicity	LL50 4,5 mg/l	96 h	Oncorhynchus mykiss	Study report (2005)	OECD Guideline 203
	Acute algae toxicity	ErC50 21 mg/l	72 h	Desmodesmus subspicatus	Study report	OECD Guideline 201
	Acute crustacea toxicity	EL50 23 mg/l	48 h	Daphnia magna	Study report (2005)	OECD Guideline 202
	Crustacea toxicity	NOEC 0,4 mg/l	21 d	Daphnia magna	Study report (2010)	OECD Guideline 211
	Acute bacteria toxicity	(EC50 > 10000 mg/l)	3 h	activated sludge of a domestic residential sewage	Study report (1994)	OECD Guideline 209

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
64742-65-0	Solvent, dewaxed heavy paraffinic petroleum	> 3
68442-22-8	Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu) esters, zinc salts	1,67

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.

12.7. 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

Disposal recommendations

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

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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 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, Entry 28

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

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Changes

This data sheet contains changes from the previous version in section(s): 1,4,6,7,9,11,12,16.

Abbreviations and acronyms

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;o;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
Eye Irrit. 2; H319	Calculation method

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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].

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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)