

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 1 of 9

1. Identification**Product identifier**

ADDINOL Penta-Cool NM 22

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

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: ADDINOL North America Inc.
Street: 80 Pine Street, 24th Floor - NY, NY 10005
E-mail: jill.frommert@addinol.de

Emergency phone number: +1 716 344 9074 available Mon - Fri, 8:00 am to 4:30 pm EST

2. Hazard(s) identification**Classification of the chemical****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].

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

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

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.

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 2 of 9

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.

Hazards not otherwise classified

Harmful by inhalation and if swallowed.

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

Do not allow uncontrolled discharge of product into the environment.

3. Composition/information on ingredients**Mixtures****Relevant ingredients**

CAS No	Components			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
246538-78-3	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics			>=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	Components	Quantity
		Specific Conc. Limits, M-factors and ATE	
246538-78-3	920-901-0	Hydrocarbons, C11-C13, isoalkanes, < 2% aromatics	>=90 %
	dermal: LD50 = > 2200 - 2500 mg/kg; oral: LD50 = > 5000 mg/kg		

Further Information

DMSO-Extrakt < 3 %, IP 346.

Classification system: The classification corresponds to the current US lists and is completed by information from specialist literature and company information.

4. First-aid measures**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. 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. Remove/Take off immediately all contaminated clothing. In case of skin irritation, consult a physician.

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.

Most important symptoms and effects, both acute and delayed

Vomiting.

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 3 of 9

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.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Strong water jet

Specific hazards arising from the chemical

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂) Nitrogen oxides (NO_x). carbon black.

Special protective equipment and precautions for fire-fighters

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.

6. Accidental release measures

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 vapors/dusts/aerosols. Keep away from sources of ignition - No smoking. Avoid contact with skin, eyes and clothes.

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).

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.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Section 12: Ecological Information (non-mandatory)

Disposal: see section 13

7. Handling and storage

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, eyes and clothes. Use only antistatically equipped (spark-free) tools. Do not put any product-impregnated cleaning rags into your trouser pockets.

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.

Safety Data Sheet**ADDINOL Penta-Cool NM 22**

Revision date: 04/23/2024

Product code: 770055

Page 4 of 9

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.

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 feed.
Keep away from: Oxidizing agent

Further information on storage conditions

Protect against: UV-radiation/sunlight. Frost. Heat.
Recommended storage temperature: 5 - 40°C

Specific end use(s)

Further information: see technical data sheet.

8. Exposure controls/personal protection**Control parameters****Additional advice on limit values**

Recommended limit value for cooling lubricants (steam and aerosol)
MAK: 10

The product does not contain any relevant quantities of substances with legally established exposure limitation.

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 must 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.

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 5 of 9

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

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	liquid
Color:	colorless
Odor:	characteristic
Odour threshold:	not determined

Test method

Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	>180 °C
Flammability:	Flammable
Lower explosion limits:	0,6 vol. %
Upper explosion limits:	6,5 vol. %
Flash point:	76 °C DIN EN ISO 2592
Auto-ignition temperature:	> 220 °C DIN 51794
Decomposition temperature:	No data available
pH-Value:	not applicable
Viscosity / kinematic: (at 40 °C)	1,3 mm²/s DIN EN ISO 3104
Solubility in other solvents	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapor pressure:	No data available
(at 20 °C)	
Density (at 15 °C):	0,77 g/cm³
Relative vapour density:	No data available

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:

< -5 °C ASTM D 7346

10. Stability and reactivity**Reactivity**

The product is stable under storage at normal ambient temperatures.

Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 6 of 9

No known hazardous reactions.

Conditions to avoid

Keep away from sources of ignition - No smoking.

Do not overheat to avoid decomposition by heat.

Incompatible materials

Reacts with: Oxidizing agent, strong.

Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂) Nitrogen oxides (NO_x). carbon black.

No known hazardous decomposition products.

11. Toxicological information**Information on toxicological effects****Acute toxicity**

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

ATEmix calculated

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

CAS No	Components				
	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.

Repeated exposure may cause skin dryness or cracking.

Sensitizing 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.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (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

Information on other hazards**Endocrine disrupting properties**

not applicable

12. Ecological information

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 7 of 9

Ecotoxicity

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

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

Persistence and degradability

Not easily bio-degradable (according to OECD-criteria). Do not allow to enter into surface water or drains.

Bioaccumulative potential**Partition coefficient n-octanol/water**

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

BCF

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

Mobility in soil

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants.

Results of PBT and vPvB assessment

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

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.

Other adverse effects

No data available

Further information

Do not allow uncontrolled discharge of product into the environment.

13. Disposal considerations**Waste treatment methods****Disposal recommendations**

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 disposed of.

14. Transport information**Land transport (ADR/RID)**

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 8 of 9

UN number or ID number: -
UN proper shipping name: -
Transport hazard class(es): -
Packing group: -

Inland waterways transport (ADN)

UN number or ID number: -
UN proper shipping name: -
Transport hazard class(es): -
Packing group: -

Marine transport (IMDG)

UN number or ID number: -
UN proper shipping name: -
Transport hazard class(es): -
Packing group: -

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: -
UN proper shipping name: -
Transport hazard class(es): -
Packing group: -

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Other applicable information

No dangerous good in sense of these transport regulations.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixtureEU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. Other information

Changes

This data sheet contains changes from the previous version in section(s): 9.

Safety Data Sheet

ADDINOL Penta-Cool NM 22

Revision date: 04/23/2024

Product code: 770055

Page 9 of 9

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;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

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

Relevant H statements (full text)

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

Other data

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.)