according to Regulation (EC) No 1907/2006

ADDINOL Precision	Mechanics Oil XF 12	
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier ADDINOL Precision Mechanics Oil XF 12 UFI:

ECK4-P70S-J20X-RFKD

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Corrosion inhibitor.

1

1.3. Details of the supplier of the	<u>safety data sheet</u>	
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	1
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/	
I.4. Emergency telephone	Healthcare Professionals: +353 (1)) 809 2566 (24 hour service)
number:		
SECTION 2: Hazards identifica	ation	

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

Distillates (petroleum), hydrotreated light paraffinic Baseoil - unspecified Distillates (petroleum), heavy hydrocracked; Base oil unspecified

Signal word:

Pictograms:



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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 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

Prolonged/repetitive skin contact may cause skin defattening or dermatitis. Process vapors can irritate airways, skin and eyes.

Do not allow uncontrolled leakage of product into the environment.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of mineral oil rafffinates and additives.

Relevant ingredients

CAS No	Chemical name			Quantity		
	EC No	No Index No REACH No				
	Classification (Regulation (EC) No 1272/2008)					
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic Baseoil - unspecified		80 - < 100 %			
	265-158-7		01-2119487077-29			
	Asp. Tox. 1; H304					
8042-47-5	White mineral oil			10 - < 20 %		
	232-455-8		01-2119487078-27			
	Asp. Tox. 1; H304					

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. L	Specific Conc. Limits, M-factors and ATE				
64742-55-8	265-158-7 Distillates (petroleum), hydrotreated light paraffinic Baseoil - unspecified					
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg					
8042-47-5	232-455-8	White mineral oil	10 - < 20 %			
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg					

Further Information

DMSO-Extract < 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.

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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.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if problems persist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Call a physician immediately.

Caution if victim vomits: Risk of aspiration!

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

The following symptoms may occur: Coughing. difficulties of breathing.

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 (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). Sulfur oxides. 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 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.

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

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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, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Provide adequate ventilation. When hot, product develops flammable vapours.

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 absorbtion 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 agent

Further information on storage conditions

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

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						
DNEL type		Exposure route	Effect	Value			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic Baseoil	- unspecified		•			
Worker DNEL,	long-term	inhalation	systemic	2,73 mg/m³			
Worker DNEL,	long-term	inhalation	local	5,58 mg/m³			
Worker DNEL,	long-term	dermal	systemic	0,97 mg/kg bw/day			
Consumer DN	EL, long-term	inhalation	local	1,19 mg/m³			
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day			
8042-47-5	White mineral oil		·				
Worker DNEL, long-term		dermal	systemic	217,05 mg/kg bw/day			
Worker DNEL,	long-term	inhalation	systemic	164,56 mg/m ³			
Consumer DNEL, long-term		dermal	systemic	93,02 mg/kg bw/day			
Consumer DN	EL, long-term	inhalation	systemic	34,78 mg/m³			
Consumer DN	EL, long-term	oral	systemic	25 mg/kg bw/day			

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PNEC values

CAS No	Substance	
Environmental	compartment	Value
64742-55-8 Distillates (petroleum), hydrotreated light paraffinic Baseoil - unspecified		
		9,33 mg/kg

Additional advice on limit values

Recommended limit value for oil mist

TWA: 5 mg/m³

STEL: 10 mg/m³

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. Breakthrough times and swelling properties of the material must be taken into consideration.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

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Melting point/freezing point:
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Test method

No data available

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Boiling point or initial boiling point and	not determined	
boiling range:		
Flammability:	No data available	
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Flash point:	150 °C	DIN EN ISO 2592
Auto-ignition temperature:	not determined	
Decomposition temperature:	No data available	
pH-Value:	not applicable	
Viscosity / kinematic:	10,5 mm²/s	ASTM D 7042
(at 40 °C)		
Water solubility:	virtually 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):	0,850 g/cm³	DIN 51757
Relative vapour density:	No data available	
Particle characteristics:	No data available	
9.2. Other information		
Information with regard to physical hazard classes	6	
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:	-38 °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.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Refer to chapter 7 No further action is necessary.

Do not overheat to avoid decomposition by heat.

10.5. Incompatible materials

Reacts with : Oxidising agent, strong; Acid.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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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.

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	Chemical name						
	Exposure route	Dose		Species	Source	Method	
64742-55-8	Distillates (petroleum), hydrotreated light paraffini			Baseoil - unspecified			
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401	
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402	
8042-47-5	White mineral oil						
	oral	LD50 mg/kg	> 5000	Rat	Study report (1987)	OECD Guideline 401	
	dermal	LD50 mg/kg	> 2000	Rabbit	Study report (1987)	OECD Guideline 402	

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 defattening 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

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
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic Baseoil - unspecified						
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
8042-47-5	White mineral oil						
	Acute fish toxicity	LL50 mg/l	> 10000		Leuciscus idus melanotus	Study report (1992)	OECD Guideline 203
	Acute crustacea toxicity	EL50 mg/l	> 100	48 h	Daphnia magna	Study report (2008)	OECD Guideline 202

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 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.

List of Wastes Code - residues/unused products

130205 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; mineral-based non-chlorinated engine, gear and lubricating oils; 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:	

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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)		
<u>14.1. UN number or ID number:</u>	-	
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		
	measures for safe transport must be followed.	
14.7. Maritime transport in bulk according	to IMO instruments	
not applicable		
Other applicable information		
No dangerous good in sense of these	e transport regulations.	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental rec	ulations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVI	۱٫۰	
Entry 3, Entry 75	1).	
National regulatory information		
Water hazard class (D):	1 - slightly hazardous to water	
15.2. Chemical safety assessment		
Chemical safety assessments for sul	ostances in this mixture were not carried out.	

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3,4,5,6,7,8,9,10,11,12,16.

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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: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
Asp. Tox. 1; H304	Calculation method

Relevant H and EUH statements (number and full text)

May be fatal if swallowed and enters airways.

Further Information

H304

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.)