

according to Regulation (EC) No 1907/2006

ADDINOL Transformer Oil TRF-HX

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

1.1. Product identifier

ADDINOL Transformer Oil TRF-HX

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

Use of the substance/mixture

Lubricant and additive.

1.3. Details of the supplier of the safety data sheet

ADDINOL Lube Oil GmbH Company name:

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

1.4. Emergency telephone +49 (0) 3461-845201 - This number is serviced during office hours.

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label

Baseoil - unspecified, Distillates (petroleum), heavy hydrocracked

Signal word: Danger GHS08 Pictograms:



Hazard statements

H304 May be fatal if swallowed and enters airways. H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P273 Avoid release to the environment.



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P405 Store locked up.

P501 Dispose of contents/container to a waste disposal system.

Additional advice on labelling

The product is classified and labelled according to EC directives or 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

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		
265-077-7	Distillates (petroleum), heavy hydrocracked; Base oil unspecified	< 30 %
64741-76-0	Xn - Harmful R65	
	Asp. Tox. 1; H304	
01-2119486951-26		
204-881-4	2,6-Di-tert-butyl-4-methylphenol	0,40 %
128-37-0	N - Dangerous for the environment R50-53	
	Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H400 H410	

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

Further Information

DMSO-Extrakt < 3 %, IP 346.

Concentration of PCBs < 1mg/kg.

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. Change contaminated clothing.

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.



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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

Foam. Extinguishing powder.

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). 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

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, eye and clothing.

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. Avoid contact with skin, eye and clothing.

Advice on protection against fire and explosion

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.





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Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Keep away from: Oxidizing agents, strong.

Further information on storage conditions

Recommended storage temperature: 10 - 30°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

Additional advice on limit values

Recommended limit value for oil mist

TWA: 5 mg/m³ STEL: 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 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: 0.7 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: NBR (Nitrile rubber). Thickness of glove material: 0.4 mm

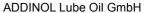
Protect skin by using skin protective cream.

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. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm





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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellow
Odour: characteristic

Test method

Changes in the physical state

Initial boiling point and boiling range: not determined

Pour point: -42 °C ASTM D 7346
Flash point: 170 °C DIN EN ISO 2719

 Ignition temperature:
 235 °C
 DIN 51794

 Density (at 15 °C):
 0,863 g/cm³
 DIN 51757

Water solubility: insoluble

Viscosity / kinematic: 10 mm²/s ASTM D 7042

(at 40 °C)

SECTION 10: Stability and reactivity

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

Refer to chapter 7 No further action is necessary.

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).

Phosphorus oxides. carbon black

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATEmix tested

	Dose	Species	Source
LD50, oral	> 5000 mg/kg	Rat	OECD 401
LD50, dermal	> 2000 mg/kg	Rabbit	OECD 402
LC50, inhalative (vapour)	5 mg/l	Rabbit	OECD 403





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Acute toxicity

CAS No	Chemical name					
	Exposure routes	Method	Dose	Species	Source	
64741-76-0	Distillates (petroleum), heavy hydrocracked; Base oil unspecified					
	oral	LD50	> 5000 mg/kg	Rat		
	dermal	LD50	> 2000 mg/kg	Rabbit		
	inhalative (4 h) vapour	LC50	> 5000 mg/l	Rabbit		

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

Remark: 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 data available

Specific effects in experiment on an animal

No data available

SECTION 12: Ecological information

12.1. Toxicity

Preparation related information:

Aquatoxicity, Fisch: LL50 > 100 mg/L (96 h), NOEL >= 100 mg/L (OECD 203)

Algae toxicity EL50 (72h) >= 100 mg/L (OECD 201)

CAS No	Chemical name						
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source	
64741-76-0	Distillates (petroleum), heavy hydrocracked; Base oil unspecified						
	Acute fish toxicity	LC50	> 100 mg/l	96 h	Fisch		
	Acute algae toxicity	ErC50	> = 100 mg/l	72 h	Alge		

12.2. Persistence and degradability

Product is partially biodegradable.

25% (21d) CEC

12.3. Bioaccumulative potential

Log P > 3.9

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.





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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.

Waste disposal number of waste from residues/unused products

130307

OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste insulating and heat transmission oils; mineral-based non-chlorinated insulating and heat transmission oils

Classified as 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: Hazard No:

Inland waterways transport (ADN)

<u>14.1. UN number:</u> -

Marine transport (IMDG)

<u>14.1. UN number:</u> -

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

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)

Very toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Harmful: may cause lung damage if swallowed.





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Relevant H- and EUH-phrases (Number and full text)

H304 May be fatal if swallowed and enters airways.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

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.)