according to Regulation (EC) No 1907/2006

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023 Product code: 778009 Page 1 of 11

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

1.1. Product identifier

ADDINOL Heat Transfer Oil XW 15 HT

Substance name: Dibenzylbenzene, ar-methyl derivative

REACH Registration Number: 01-2119488667-17-0000

CAS No: 53585-53-8 EC No: 258-649-2

UFI: AJPG-S748-F20X-N1R1

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

Use of the substance/mixture

Material(s) for heat transfer

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

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Repr. 1B; H360FD Asp. Tox. 1; H304 Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Dibenzylbenzene, ar-methyl derivative

Signal word: Danger

according to Regulation (EC) No 1907/2006

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Pictograms:





Hazard statements

H304 May be fatal if swallowed and enters airways.
H360FD May damage fertility. May damage the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P308+P313 IF exposed or concerned: Get medical advice/attention.

P331 Do NOT induce vomiting.

P405 Store locked up.

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Special labelling of certain mixtures

Restricted to professional users.

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

3.1. Substances

Hazardous components

CAS No	Chemical name				
	EC No Index No REACH No				
	Classification (Regulation (EC) No 1272/2008)				
53585-53-8	Dibenzylbenzene, ar-methyl derivative			100 %	
	258-649-2 01-2119488667-17-0000				
	Repr. 1B, Asp. Tox. 1, Aquatic Chronic 1; H360FD H304 H410				

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	imits, M-factors and ATE	
53585-53-8	258-649-2	Dibenzylbenzene, ar-methyl derivative	100 %
	inhalation: LC50 = >0,24 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = >= 10000 mg/kg Aquatic Chronic 1; H410: M=10		

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

according to Regulation (EC) No 1907/2006

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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. Get medical advice/attention if you feel unwell.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm. In case of persistent complaints seek medial advice.

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 eves

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

Call a physician immediately. Do NOT induce vomiting. Caution if victim vomits: Risk of aspiration! Rinse mouth immediately and drink plenty of water.

If unconscious but breathing normally, place in recovery position and seek medical advice.

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

May be fatal if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Extinguishing powder. Water fog.

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).

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, 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

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.

according to Regulation (EC) No 1907/2006

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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. Avoid contact with skin, eyes and clothes. Wear personal protection equipment. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Advice on protection against fire and explosion

Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/] equipment. Vapours may form explosive mixtures with air.

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

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			
DNEL type		Exposure route	Effect	Value
53585-53-8	Dibenzylbenzene, ar-methyl derivative			
Worker DNEL,	long-term	inhalation	systemic	3,5 mg/m³
Worker DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,25 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m³

according to Regulation (EC) No 1907/2006

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PNEC values

CAS No	Substance				
Environmental	Value				
53585-53-8	53585-53-8 Dibenzylbenzene, ar-methyl derivative				
Freshwater	0,000028 mg/l				
Marine water		0,000003 mg/l			
Freshwater se	0,11 mg/kg				
Marine sediment		0,11 mg/kg			
Secondary poisoning		11,1 mg/kg			
Soil	2 mg/kg				

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls





Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations. Minimum room ventilation rate for handling/application (air changes per hour): 10

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: FKM (fluororubber). Thickness of glove material: 0.4 mm.

Wearing time with occasional contact (splashes): 30 min

Suitable material: FKM (fluororubber). Thickness of glove material: 0.2 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: colourless, yellow
Odour: characteristic

according to Regulation (EC) No 1907/2006

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Odour threshold: not determined

Test method

Melting point/freezing point: -39 - -32 °C

Boiling point or initial boiling point and 390 °C ASTM D 1078

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available

Flash point: 200 °C DIN EN ISO 22719

Auto-ignition temperature:

Decomposition temperature:

PH-Value:

No data available

not applicable

Viscosity / kinematic: 16,4 mm²/s DIN 51562

(at 40 °C)

Water solubility: virtually insoluble

Solubility in other solvents

No data available

Partition coefficient n-octanol/water: > 6 OECD (TG) 117

Vapour pressure: <0,01 hPa

(at 20 °C)

Density (at 15 °C): 1,045 g/cm³ DIN 51757

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: -34 °C DIN ISO 3016

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

Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

Protect from sunlight. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Do not overheat to avoid decomposition by heat.

10.5. Incompatible materials

Oxidizing agent

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2).

No known hazardous decomposition products.

according to Regulation (EC) No 1907/2006

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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.

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
53585-53-8	Dibenzylbenzene, ar-methyl derivative							
	oral	LD50 mg/kg	>= 10000	Rat	Study report (1984)	OECD Guideline 401		
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1990)	OECD Guideline 402		
	inhalation (4 h) vapour	LC50 mg/l	>0,24	Rat		OECD 403		

Irritation and corrosivity

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

May damage fertility. May damage the unborn child. (Dibenzylbenzene, ar-methyl derivative)

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

Carcinogenicity: 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.

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

Very toxic to aquatic life with long lasting effects.

according to Regulation (EC) No 1907/2006

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CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
53585-53-8	Dibenzylbenzene, ar-methyl derivative							
	Acute fish toxicity	LC50 mg/l	> 0,32	96 h	Danio rerio	REACh Registration Dossier	EU Method C.1	
	Acute algae toxicity	ErC50 mg/l	>0,016	72 h	Skeletonema costatum			
	Acute crustacea toxicity	EC50 mg/l	>0,029	48 h	Daphnia magna			
	Fish toxicity	NOEC mg/l	>0,0046	14 d	Leuciscus idus (golden orfe)		OECD 204	
	Crustacea toxicity	NOEC mg/l	>0,0014	21 d	Daphnia magna		OECD 211	

12.2. Persistence and degradability

No data available

CAS No	Chemical name					
	Method Value d Source					
	Evaluation					
53585-53-8	Dibenzylbenzene, ar-methyl derivative					
		65%	62			

12.3. Bioaccumulative potential

Bioconcentration factor (BCF): 7525 (literature value)

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
53585-53-8	Dibenzylbenzene, ar-methyl derivative	>6

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

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

130308 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN

CHAPTERS 05, 12 AND 19); waste insulating and heat transmission oils; synthetic insulating and

heat transmission oils; hazardous waste

Contaminated packaging

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Dispose of

according to Regulation (EC) No 1907/2006

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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: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es): 9
14.4. Packing group: III

Hazard label:



M6

Classification code:

Special Provisions: 274 335 375 601

Transport category: 3
Hazard No: 90
Tunnel restriction code: -

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9



Classification code:

Special Provisions: 274 335 375 601

Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es): 9
14.4. Packing group: III

Hazard label:



Special Provisions: 274 335 969

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9

according to Regulation (EC) No 1907/2006

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Special Provisions: A97 A158 A197 A215

Limited quantity Passenger: 30 kg G Passenger LQ: Y964 Excepted quantity: E1

IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: Dibenzylbenzene, ar-methyl derivative

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

not applicable

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

Information according to 2012/18/EU

(SEVESO III):

E1 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of

child-bearing age.

Water hazard class (D): 3 - highly hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,4,7,8,9,10,12,14,15.

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 -

according to Regulation (EC) No 1907/2006

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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

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.
H360FD May damage fertility. May damage the unborn child.
H410 Very 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.