

Safety Data Sheet

according to UK REACH Regulation

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: Gidov Oil & Logistics Ltd.
Street: 76 Cobham Road, Ferndown Industrial Estate
Place: GB-TN157DA Wrotham, Sevenoaks Kent
Telephone: +44 7729229830
Telefax: +44 7729229830
e-mail: sales@addinol.co.uk
Internet: https://www.gidovlogistics.co.uk/

1.4. Emergency telephone number:

+44 7729229830 - This number is serviced during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

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

GB CLP Regulation

Hazard components for labelling

Dibenzylbenzene, ar-methyl derivative

Signal word: Danger

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 2 of 11

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 defatting 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			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
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. Limits, 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

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 3 of 11

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 medical 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 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

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.

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 4 of 11

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 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 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	Exposure route	Effect	Value
53585-53-8	Dibenzylbenzene, ar-methyl derivative			
Worker DNEL, long-term		inhalation	systemic	3,5 mg/m ³
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/m ³

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 5 of 11

PNEC values

CAS No	Substance	
Environmental compartment		Value
53585-53-8	Dibenzylbenzene, ar-methyl derivative	
Freshwater		0,000028 mg/l
Marine water		0,000003 mg/l
Freshwater sediment		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. Breathing protection with filter against organic gases and vapours type A - boiling point > 65°C: A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless, yellow
Odour:	characteristic

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 6 of 11

Odour threshold: not determined

	Test method
Melting point/freezing point:	-39 - -32 °C
Boiling point or initial boiling point and boiling range:	390 °C ASTM D 1078
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:	No data available
Decomposition temperature:	No data available
pH-Value:	not applicable
Viscosity / kinematic: (at 40 °C)	16,4 mm ² /s DIN 51562
Water solubility:	virtually insoluble
Solubility in other solvents	No data available
Partition coefficient n-octanol/water:	> 6 OECD (TG) 117
Vapour pressure: (at 20 °C)	<0,01 hPa
Density (at 15 °C):	1,045 g/cm ³ 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 productsIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂).

No known hazardous decomposition products.

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 7 of 11

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****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.

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 8 of 11

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
	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 UK REACH.

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

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 9 of 11

waste according to applicable legislation. Packing which cannot be properly cleaned must be thrown away.

SECTION 14: Transport information**Land transport (ADR/RID)**

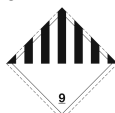
14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M6
 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): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M6
 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: 9



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): 9
14.4. Packing group: III
 Hazard label: 9

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 10 of 11



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 -

Safety Data Sheet

according to UK REACH Regulation

ADDINOL Heat Transfer Oil XW 15 HT

Revision date: 27.10.2023

Product code: 778009

Page 11 of 11

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.