

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 13/11/2009 Revision date: 30/04/2024 Supersedes version of: 14/12/2023 Version: 6.3

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

1.1. Product identifier

Product form : Mixture

Product name : WOLF ARIO ISO 46

Product code : 4210
Type of product : WOLF
Product group : Blend

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use

Industrial/Professional use spec : Non-dispersive use

Used in closed systems
: Lubricants and additives

1.2.2. Uses advised against

Function or use category

No additional information available

1.3. Details of the supplier of the safety data sheet

WOLF OIL CORPORATION N.V.

Georges Gilliotstraat, 52 2620 Hemiksem, Antwerpen

Belaië

T 0032 (0)3 870 00 00, F 0032 (0)3 870 00 99

msds@wolfoil.com, https://www.wolflubes.com/

1.4. Emergency telephone number

Emergency number : 0032 (0)3 870 00 00

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital Msida MSD 2090	+356 2545 6508	
Sweden	Giftinformationscentralen	Box 60 500 171 76 Stockholm	112 – begär Giftinformation +46 10 456 6700 (Från utlandet)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, H412

Category 3

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Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains Aryl amine. May produce an allergic reaction.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C10-C13, aromatics, >1% naphthalene	EC-No.: 926-273-4 REACH-no: 01-2119451151- 53	0.1 – 0.99	Carc. 2, H351 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
2,6-Di-tert-butylphenol	CAS-No.: 128-39-2 EC-No.: 204-884-0 REACH-no: 01-2119490822- 33	0.1 – 0.49	Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aryl amine	CAS-No.: 90-30-2 EC-No.: 201-983-0	0.1 – 0.24	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
naphthalene	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2	0.1 – 0.24	Carc. 2, H351 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Not expected to require first aid measures.

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First-aid measures after skin contact : Wash skin with mild soap and water.

First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes. First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/effects after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of

normal use.

Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal

use.

Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of

normal use.

Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of

normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Foam. Powder. Dry chemical product.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire. Firefighting instructions : Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Impound and recover large spill by mixing it with inert granular solids.

Methods for cleaning up : Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.

Other information : Spill area may be slippery. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all unnecessary exposure. Both local exhaust and general room ventilation are

usually required.

Handling temperature : < 40 °C

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : ≤ 40 °C

Storage area : Store in dry, cool, well-ventilated area.

Germany

Storage class (LGK, TRGS 510) : LGK 10-13 - Other combustible and non-combustible substances

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Aryl amine (90-30-2)		
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA) 2 mg/m³ E (Inhalable fraction)		
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	3 mg/m³ E (Inhalable fraction)	
KZGW (OEL STEL)	6 mg/m³ E (Inhalable fraction)	
naphthalene (91-20-3)		
EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	50 mg/m³	
	10 ppm	
Austria - Occupational Exposure Limits		
MAK (OEL TWA)	50 mg/m³	
	10 ppm	
Belgium - Occupational Exposure Limits		
OEL TWA	53 mg/m³	
	10 ppm	
OEL STEL	80 mg/m³	
	15 ppm	
Bulgaria - Occupational Exposure Limits		
OEL TWA	50 mg/m³ 8h	
OEL STEL	75 mg/m³ 15 min.	

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naphthalene (91-20-3)			
Denmark - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
	10 ppm		
OEL STEL	100 mg/m³		
	20 ppm		
Estonia - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
Finland - Occupational Exposure Limits			
HTP (OEL TWA)	5 mg/m³		
	1 ppm		
HTP (OEL STEL)	10 mg/m³		
	2 ppm		
France - Occupational Exposure Limits			
VME (OEL TWA)	50 mg/m³		
	10 ppm		
Germany - Occupational Exposure Limits (TRGS 9	00)		
AGW (OEL TWA)	2 mg/m³		
	0.4 ppm		
Hungary - Occupational Exposure Limits			
AK (OEL TWA)	50 mg/m³		
Ireland - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
	10 ppm		
Italy - Occupational Exposure Limits			
OEL TWA	50 mg/m³		
	10 ppm		
Latvia - Occupational Exposure Limits			
OEL TWA	50 mg/m ³		
	10 ppm		
Netherlands - Occupational Exposure Limits			
TGG-8u (OEL TWA)	50 mg/m³		
TGG-15min (OEL STEL)	80 mg/m³		
Poland - Occupational Exposure Limits			
NDS (OEL TWA)	20 mg/m³		
NDSCh (OEL STEL)	50 mg/m³		
Spain - Occupational Exposure Limits	•		
VLA-ED (OEL TWA)	50 mg/m³		
	10 ppm		

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Name				
15 ppm	naphthalene (91-20-3)			
Sweden - Occupational Exposure Limits NGV (OEL TWA) 50 mg/m³ 10 ppm KTV (OEL STEL) 80 mg/m³ 15 ppm United Kingdom - Occupational Exposure Limits WEL TWA (OEL TWA) 50 mg/m³ Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	VLA-EC (OEL STEL)	80 mg/m ³		
NGV (OEL TWA) 50 mg/m³ 10 ppm 80 mg/m³ 15 ppm 15 ppm United Kingdom - Occupational Exposure Limits WEL TWA (OEL TWA) 50 mg/m³ Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³		15 ppm		
10 ppm	Sweden - Occupational Exposure Limits			
RTV (OEL STEL)	NGV (OEL TWA)	50 mg/m³		
United Kingdom - Occupational Exposure Limits WEL TWA (OEL TWA) Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³		10 ppm		
United Kingdom - Occupational Exposure Limits WEL TWA (OEL TWA) 50 mg/m³ Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	KTV (OEL STEL)	80 mg/m³		
WEL TWA (OEL TWA) Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³		15 ppm		
Norway - Occupational Exposure Limits Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	United Kingdom - Occupational Exposure Limits			
Grenseverdi (OEL TWA) 50 mg/m³ 10 ppm Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	WEL TWA (OEL TWA)	50 mg/m³		
Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	Norway - Occupational Exposure Limits			
Switzerland - Occupational Exposure Limits MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	Grenseverdi (OEL TWA)	50 mg/m³		
MAK (OEL TWA) 50 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³		10 ppm		
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	Switzerland - Occupational Exposure Limits			
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA 10 mg/m³	MAK (OEL TWA)	50 mg/m³		
ACGIH OEL TWA 10 mg/m³		10 ppm		
	USA - ACGIH - Occupational Exposure Limits			
ACGIH OEL STEL 15 fibers/cm³	ACGIH OEL TWA	10 mg/m³		
	CGIH OEL STEL 15 fibers/cm³			
Hydrocarbons, C10-C13, aromatics, >1% naphthalene				
Czech Republic - Occupational Exposure Limits				
PEL (OEL TWA) 200 mg/m³				
Romania - Occupational Exposure Limits				
OEL TWA 100 mg/m³				
OEL STEL 200 mg/m³	200 mg/m³			

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information

: 5 mg/m3 for oil mists (TWA, 8h-workday) recommended, based upon the ACGIH TLV (Analysis according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Edition).

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

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8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves.

Personal protective equipment symbol(s):





8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use

Hand protection:

Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Nitrile rubber (NBR) /

8.2.2.3. Respiratory protection

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : brown. Appearance : Oily liquid. : Characteristic. Odour : Not available Odour threshold Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Not available Lower explosion limit : Not available Upper explosion limit : Not available

Flash point : > 195 °C (ASTM D92)

Auto-ignition temperature : Not available

Decomposition temperature : Not available

pH : Not available

Viscosity, kinematic : 46 mm²/s @40°C

Solubility : Slightly soluble, the product remains on the water surface.

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density : 881 kg/m³ @15°C Relative density : Not available Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong oxidizers. acids. Bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Aryl amine (90-30-2)		
LD50 oral rat	1625 mg/kg	
LD50 dermal rabbit	> 5000 mg/kg	
naphthalene (91-20-3)		
LD50 oral rat	533 mg/kg (OECD 401)	
LD50 dermal rat	> 16000 mg/kg (OECD 402)	
LC50 Inhalation - Rat	500 mg/m³ @8h	
LC50 Inhalation - Rat (Vapours)	> 0.4 mg/l/4h (OECD 403)	
Hydrocarbons, C10-C13, aromatics, >1% naphthalene		
LD50 oral rat	6318 mg/kg (OECD 401)	
LD50 dermal rabbit	> 2000 mg/kg (OECD 402)	
LC50 Inhalation - Rat (Dust/Mist)	> 4778 mg/l/4h (OECD 403)	
LC50 Inhalation - Rat (Vapours)	> 0.00528 mg/l/4h	

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naphthalene (91-20-3)			
Mammalian Chromosomal Aberration Test, In vitro, mammalian	Positive (OECD 473, WOE does not support classification.)		
Bacterial Reverse Mutation Test, In vitro, Bacteria	Negative		
, In vitro, mammalian	Negative		
, In vivo, mammalian	Negative (OECD 486)		
Hydrocarbons, C10-C13, aromatics, >1% naphthalene			
Bacterial Reverse Mutation Test, In vitro, Bacteria	Negative		
Mammalian Chromosomal Aberration Test, In vitro, mammalian	Negative (OECD 473)		
Mammalian Erythrocyte Micronucleus Test, In vivo, mammalian	Negative (OECD 474)		
Mammalian Bone Marrow Chromosomal Aberration Test, In vivo, mammalian	Negative (OECD 475)		
2,6-Di-tert-butylphenol (128-39-2)			
Bacterial Reverse Mutation Test, In vitro, Bacteria	Negative		
Mammalian Chromosomal Aberration Test, In vitro, mammalian	Negative (OECD 473)		
Reproductive toxicity : STOT-single exposure :	Not classified Not classified Not classified Not classified		
Aryl amine (90-30-2)	Nut classified		
NOAEL (oral, rat, 28 days)	5 mg/kg bodyweight/day (OECD 407)		
NOAEL (subchronic, oral, 90 days)	5 mg/kg bodyweight/day (OECD 408)		
STOT-repeated exposure	May cause damage to organs (circulatory system, kidneys) through prolonged or repeated exposure.		
naphthalene (91-20-3)			
LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l (OECD 413)		
NOAEL (subchronic, oral, 90 days)	200 mg/kg bodyweight/day (OECD 408)		
NOAEL (subchronic, dermal, 90 days)	1000 mg/kg bodyweight/day (OECD 411)		
Hydrocarbons, C10-C13, aromatics, >1% naphthalene			
NOAEL (subchronic, oral, 90 days)	300 mg/kg bodyweight/day (OECD 408)		
2,6-Di-tert-butylphenol (128-39-2)			
NOAEL (subacute, oral, 28 days)	100 mg/kg bodyweight/day (OECD 407)		
NOAEL (subchronic, oral, 90 days)	270 mg/kg bodyweight/day (OECD 408)		
Aspiration hazard : Not classified			
WOLF ARIO ISO 46			
Viscosity, kinematic	46 mm²/s @40°C		

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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

: Harmful to aquatic life with long lasting effects.

: Not classified

(chronic)

эноној				
Aryl amine (90-30-2)				
LC50 - Fish [1]	0.44 mg/l @96h; Oncorhynchus mykiss			
EC50 - Other aquatic organisms [1] 0.3 mg/l @48h; Daphnia magna				
EC50 96h - Algae [1]	0.93 mg/l Pseudokirchneriella subcapitata			
NOEC (chronic)	0.032 mg/l Daphnia magna			
NOEC chronic crustacea	0.032 mg/l Daphnia magna			
naphthalene (91-20-3)	naphthalene (91-20-3)			
LC50 - Fish [1]	1.6 mg/l @96h; Oncorhynchus mykiss			
EC50 - Crustacea [1]	2.16 mg/l @48h; Daphnia magna			
EC50 96h - Algae [1]	2.96 mg/l Pseudokirchneriella subcapitata			
NOEC (chronic)	0.59 mg/l @125d - Daphnia duplex			
NOEC chronic fish	0.12 mg/l @40d; Oncorhynchus gorbuscha			
Hydrocarbons, C10-C13, aromatics, >1% naphthalene				
LC50 - Fish [1]	2 – 5 mg/l @96h; Oncorhynchus mykiss			
EC50 - Crustacea [1]	1.4 mg/l @48h; Daphnia magna			
EC50 72h - Algae [1]	> 1 mg/l Pseudokirchneriella subcapitata			
NOEC (chronic)	0.48 mg/l @21d - Daphnia magna			
NOEC chronic algae	1 mg/l Pseudokirchneriella subcapitata			
2,6-Di-tert-butylphenol (128-39-2)				
LC50 - Fish [1]	1.4 mg/l @4d; Pimephales promelas			
LC50 - Fish [2]	13 mg/l @4d; Oncorhynchus mykiss			
EC50 - Crustacea [1]	0.45 mg/l @2d; Daphnia magna			
EC50 - Crustacea [2]	0.8 mg/l @2d; Daphnia magna			
EC50 - Other aquatic organisms [1]	> 1000 mg/l @0,1d; derelinquere caeno			
EC50 96h - Algae [1]	1.2 mg/l @3d; Selenastrum capricornutum			
NOEC (chronic)	0.035 mg/l @21d - Daphnia magna			
NOEC chronic crustacea	0.035 mg/l @21d; Daphnia magna			
NOEC chronic algae	0.64 mg/l @96h; Pseudokirchneriella subcapitata			
	<u> </u>			

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12.2. Persistence and degradability

WOLF ARIO ISO 46			
Persistence and degradability	Not soluble in water, so only minimally biodegradable.		
Aryl amine (90-30-2)			
Persistence and degradability	Rapidly degradable		
Biodegradation	0 % @28d (OECD 301C)		
naphthalene (91-20-3)			
Persistence and degradability Inherently biodegradable.			
Biodegradation 0 – 2 % @28d (OECD 302C)			
Hydrocarbons, C10-C13, aromatics, >1% naphthalene			
Persistence and degradability	Not rapidly degradable		
Biodegradation	58.6 % @28d (OECD 301F)		
2,6-Di-tert-butylphenol (128-39-2)			
Persistence and degradability	Rapidly degradable		
Biodegradation	5 % @28d (OECD TG 301 B)		

12.3. Bioaccumulative potential

Aryl amine (90-30-2)			
Bioconcentration factor (BCF REACH)	1424		
Partition coefficient n-octanol/water (Log Pow)	4.28		
naphthalene (91-20-3)			
Partition coefficient n-octanol/water (Log Pow) 3.4			
Hydrocarbons, C10-C13, aromatics, >1% naphthalene			
Bioconcentration factor (BCF REACH) 99 - 5780			
Partition coefficient n-octanol/water (Log Pow) 2.8 – 6.5			
2,6-Di-tert-butylphenol (128-39-2)			
Partition coefficient n-octanol/water (Log Kow) 4.5 Measurements			

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

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Rail transport

No data available

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BlmSchV) : Is not subject of the Hazardous Incident Ordinance (12. BlmSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen –

Vruchtbaarheid
SZW-lijst van reprotoxische stoffen – Ontwikkeling : I

: None of the components are listed

: None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

The requirements from the Danish Working Environment Authorities regarding work with

carcinogens must be followed during use and disposal

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
3	Composition/information on ingredients	Modified	

Abbreviations and acronyms:		
	ACGIH: American Conference of Governmental Industrial Hygienists	
	TWA: Time Weighted Average	
	TLV: Threshold Limit Value	
	ASTM: American Society for Testing and Materials	
	ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route	
	RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail	
	ADNR: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin	
	IMDG: International Maritime Dangerous Goods	
	ICAO: International Civil Aviation Organization	
	IATA: International Air Transport Association	
	STEL: Short Term Exposure Limit	
	LD50: median Lethal Dose for 50% of subjects	
	ATE: acute toxicity estimate	
	LC50: median Lethal Concentration for 50% of subjects	
	EC50: concentration producing 50% effect	

Other information

: The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Asp. Tox. 1	Aspiration hazard, Category 1	

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Full text of H- and EUH-statements:		
Carc. 2	Carcinogenicity, Category 2	
EUH208	Contains Aryl amine. May produce an allergic reaction.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H351	Suspected of causing cancer.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.