Safety Data Sheet

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

1.1. Product identifier

ASTRON LHM +

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

Use of the substance/mixture

hydraulic oil

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	Duran Lubricants & Chemicals GmbH	
Street:	Rodderheide 3-7	
Place:	D-33824 Werther	
Telephone:	+49 (0)5203-901510	Fax: +49 (0)5203-901515
e-mail:	info@duran-oil.com	
Internet:	www.fosser.de	
Responsible Department:	Produktsicherheit / Product Safety info@duran-oil.com	

1.4. Emergency telephone number:

Giftinformationszentrum Nord (Göttingen)+49 (0)551/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aspiration hazard: Asp. Tox. 1
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

Regulation (EC) No. 1272/2008

Hazard components for labelling

Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics
Tris(methylphenyl) phosphate

Signal word: Danger

Pictograms:

Hazard statements

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

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P501	Dispose of contents / container in accordance with official regulations.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mineral oil, Additive

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			40 - < 50 %
	265-158-7	649-468-00-3	01-2119487077-29	
	Asp. Tox. 1; H304			
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics			40 - < 50 %
	934-954-2		01-2119826592-36	
	Asp. Tox. 1; H304			
64742-79-6	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified			5 - < 10 %
	265-182-8	649-222-00-5	01-2119471311-49	
	Asp. Tox. 1; H304			
128-39-2	2,6-di-tert-butylphenol			0,25 - < 1,0 %
	204-884-0		01-2119480422-43	
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H315 H400 H410			
1330-78-5	Tris(methylphenyl) phosphate			0,1 - < 0,25 %
	215-548-8		01-2119531335-46	
	Repr. 1B, STOT SE 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H360 H370 H372 H400 H410			
121158-58-5	phenol, dodecyl-, branched			0,025 -< 0,1 %
	310-154-3	604-092-00-9	01-2119513207-49	
	Repr. 1B, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H360F H314 H318 H400 H410			
91-20-3	naphthalene			< 0,01 %
	202-049-5	601-052-00-2	01-2119561346-37	
	Carc. 2, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H351 H302 H400 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		
64742-55-8	265-158-7	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified	40 - < 50 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg		
1174522-45-2	934-954-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	40 - < 50 %
	dermal: LD50 = > 3160 mg/kg; oral: LD50 = > 5000 mg/kg		
64742-79-6	265-182-8	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified	5 - < 10 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
128-39-2	204-884-0	2,6-di-tert-butylphenol	0,25 - < 1,0 %
	oral: LD50 = > 5000 mg/kg M akut; H400: M=1		
1330-78-5	215-548-8	Tris(methylphenyl) phosphate	0,1 - < 0,25 %
	oral: LD50 = > 20000 mg/kg M akut; H400: M=1 M chron.; H410: M=1		
121158-58-5	310-154-3	phenol, dodecyl-, branched	0,025 -< 0,1 %
	dermal: LD50 = ca. 15000 mg/kg; oral: LD50 = 2100 mg/kg M akut; H400: M=10 M chron.; H410: M=10		
91-20-3	202-049-5	naphthalene	< 0,01 %
	inhalation: LC50 = > 77,7 mg/l (vapours); dermal: LD50 = > 16000 mg/kg; oral: LD50 = 710 mg/kg		

Further Information

This mixture contains no substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.
Take off contaminated clothing and wash it before reuse.
In case of skin irritation, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth thoroughly with water.
Let water be drunken in little sips (dilution effect).
Do NOT induce vomiting.
In all cases of doubt, or when symptoms persist, seek medical advice.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use water spray jet to protect personnel and to cool endangered containers.
Co-ordinate fire-fighting measures to the fire surroundings.

- Water spray jet
- Foam
- Carbon dioxide (CO2).
- Extinguishing powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.
In case of fire may be liberated:

- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- Carbon dioxide (CO2).
- Sulphur dioxide (SO2)
- Pyrolysis products, toxic

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Use of protective clothing
In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

Keep people at a distance and stay on the windward side.
Special danger of slipping by leaking/spilling product.

For non-emergency personnel

Wear protective gloves/protective clothing and eye/face protection.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.
Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

For containment

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.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.
Remove from the water surface (e.g. skimming, sucking).

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid formation of oil dust.
Use personal protection equipment.
Do not put any product-impregnated cleaning rags into your trouser pockets.
Clear spills immediately.

Advice on protection against fire and explosion

No special fire protection measures are necessary.
Take precautionary measures against static discharges.
Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.
Keep container tightly closed.
Floors should be impervious, resistant to liquids and easy to clean.

Hints on joint storage

Do not store together with:
- Materials capable of ignition under almost all normal temperature conditions
- Explosives
- Radioactive substances
- Infectious substances

Further information on storage conditions

Note Regulation on facilities for the storage, filling and handling water-polluting substances. ..

7.3. Specific end use(s)

hydraulic oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
91-20-3	Naphthalene	10	50		TWA (8 h)	EU

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	2,73 mg/m³
Worker DNEL, long-term		inhalation	local	5,58 mg/m³
Worker DNEL, long-term		dermal	systemic	0,97 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	1,19 mg/m³
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
64742-79-6	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified			
Worker DNEL, long-term		inhalation	systemic	16,4 mg/m³
Worker DNEL, acute		inhalation	systemic	5002,67 mg/m³
Worker DNEL, long-term		dermal	systemic	2,91 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,85 mg/m³
Consumer DNEL, acute		inhalation	systemic	3001,6 mg/m³
Consumer DNEL, long-term		dermal	systemic	1,25 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,25 mg/kg bw/day
128-39-2	2,6-di-tert-butylphenol			
Worker DNEL, long-term		inhalation	systemic	70,61 mg/m³
Worker DNEL, long-term		dermal	systemic	11,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	20,9 mg/m³
Consumer DNEL, long-term		dermal	systemic	6,75 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	6,75 mg/kg bw/day
1330-78-5	Tris(methylphenyl) phosphate			
Worker DNEL, long-term		inhalation	systemic	0,18 mg/m³
Worker DNEL, long-term		dermal	systemic	0,41 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,03 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,15 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,02 mg/kg bw/day
121158-58-5	phenol, dodecyl-, branched			
Worker DNEL, acute		inhalation	systemic	44,18 mg/m³
Worker DNEL, long-term		dermal	systemic	0,25 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	166 mg/kg bw/day

Consumer DNEL, long-term	inhalation	systemic	0,79 mg/m³
Consumer DNEL, acute	inhalation	systemic	13,26 mg/m³
Consumer DNEL, long-term	dermal	systemic	0,075 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,075 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	1,26 mg/kg bw/day
91-20-3 naphthalene			
Worker DNEL, long-term	inhalation	systemic	25 mg/m³
Worker DNEL, long-term	inhalation	local	25 mg/m³
Worker DNEL, long-term	dermal	systemic	3,57 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified
Secondary poisoning	9,33 mg/kg
64742-79-6	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified
Secondary poisoning	17000 mg/kg
128-39-2	2,6-di-tert-butylphenol
Freshwater	0,001 mg/l
Freshwater (intermittent releases)	0,004 mg/l
Marine water	0 mg/l
Freshwater sediment	0,317 mg/kg
Marine sediment	0,032 mg/kg
Secondary poisoning	60 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0,697 mg/kg
1330-78-5	Tris(methylphenyl) phosphate
Freshwater	0,001 mg/l
Freshwater (intermittent releases)	0,001 mg/l
Marine water	0 mg/l
Freshwater sediment	2,05 mg/kg
Marine sediment	0,205 mg/kg
Secondary poisoning	0,65 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	1,01 mg/kg
121158-58-5	phenol, dodecyl-, branched
Freshwater	0,000074 mg/l
Freshwater (intermittent releases)	0,00037 mg/l
Marine water	0,000007 mg/l
Freshwater sediment	0,226 mg/kg
Marine sediment	0,027 mg/kg
Secondary poisoning	4 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	0,118 mg/kg
91-20-3	naphthalene
Freshwater	0,0024 mg/l
Freshwater (intermittent releases)	0,02 mg/l
Marine water	0,0024 mg/l
Freshwater sediment	0,0672 mg/kg
Marine sediment	0,0672 mg/kg

Micro-organisms in sewage treatment plants (STP)	2,9 mg/l
Soil	0,0533 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse.
Wash hands before breaks and after work.
When using do not eat, drink, smoke, sniff.

Eye/face protection

During filling, metering, mixing and sampling must be used:
Wear eye/face protection. DIN EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Recommended glove articles: EN ISO 374
Suitable material: NBR (Nitrile rubber)
Thickness of the glove material: 0,4 mm
Breakthrough times and swelling properties of the material must be taken into consideration. Breakthrough time: > 8h
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing. DIN EN 14605

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Combination filtering device Typ: A-P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow-green
Odour:	characteristic
Odour threshold:	not determined

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
Flash point:	105 °C	ASTM D 93

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Explosive properties

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits:	not determined
Upper explosion limits:	not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

The product is not: oxidising.

Vapour pressure:	not determined	
Density (at 15 °C):	0,842 - 0,852 g/cm³	ISO 12185
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined	
Viscosity / kinematic: (at 40 °C)	17 - 19 mm²/s	DIN EN ISO 3104
Relative vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

The formation of combustible vapours is possible at temperatures above: Flash point
Reaction with: Oxidizing agent

10.4. Conditions to avoid

Avoid: Thermal decomposition

10.5. Incompatible materials

Materials to avoid:

- Acids
- Reducing agent
- Oxidising agent

10.6. Hazardous decomposition products

Hazardous combustion products:

- Carbon monoxide (CO)
- Carbon dioxide (CO2)
- Nitrogen oxides (NOx)

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
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1982)	OECD Guideline 402
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1983)	OECD Guideline 401
	dermal	LD50 mg/kg	> 3160	Rabbit	Study report (1983)	OECD Guideline 402
64742-79-6	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1982)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rabbit	Study report (1982)	OECD Guideline 402
128-39-2	2,6-di-tert-butylphenol					
	oral	LD50 mg/kg	> 5000	Rat	Study report (1991)	OECD Guideline 401
1330-78-5	Tris(methylphenyl) phosphate					
	oral	LD50 mg/kg	> 20000	Rat	Study report (1976)	other: Standard Federal Hazardous Substa
121158-58-5	phenol, dodecyl-, branched					
	oral	LD50 mg/kg	2100	Rat	Publication (1978)	OECD Guideline 401
	dermal	LD50 mg/kg	ca. 15000	Rabbit	Study report (1968)	OECD Guideline 402
91-20-3	naphthalene					
	oral	LD50 mg/kg	710	Mouse	FUND. APPL. TOXICOL 4: 406-419 (1984) (1	OECD Guideline 401
	dermal	LD50 mg/kg	> 16000	Rat	Study report (1980)	OECD Guideline 402
	inhalation (4 h) vapour	LC50 mg/l	> 77,7	Rat	Study report (1985)	other: EPA TSCA

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

Based on available data, the classification criteria are not met.

The product contains less than 3% DMSO extract (method IP346). A classification as a carcinogen with R45 is deleted. (Note L)

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.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
64742-55-8	Distillates (petroleum), hydrotreated light paraffinic; Baseoil - unspecified						
	Acute fish toxicity	LL50 mg/l	> 100	96 h	Pimephales promelas	Study report (1995)	OECD Guideline 203
	Fish toxicity	NOEC mg/l	>= 1000	14 d	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
1174522-45-2	Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics						
	Acute fish toxicity	LL50 mg/l	> 1028	96 h	Scophthalmus maximus	Study report (2002)	other: "Guideline for measuring the acut
	Acute algae toxicity	ErC50 mg/l	> 10000	72 h	Skeletonema costatum	Study report (1997)	ISO 10253
	Acute crustacea toxicity	EL50 mg/l	> 3190	48 h	other aquatic arthropod: Acartia tonsa	Study report (2008)	other: ISO 14669 - 1999 Water quality -
	Fish toxicity	NOEC mg/l	> 1000	28 d	Oncorhynchus mykiss	Company report (2010)	The aquatic toxicity was estimated by a
	Crustacea toxicity	NOEC mg/l	> 1000	21 d	Daphnia magna	Company report (2010)	The aquatic toxicity was estimated by a
	Acute bacteria toxicity	(> 100 mg/l)		3 h	activated sludge of a predominantly domestic sewag	Study report (1994)	OECD Guideline 209
64742-79-6	Gas oils (petroleum), hydrodesulfurized; Gasoil - unspecified						
	Acute fish toxicity	LL50 mg/l	1,13	96 h	Oncorhynchus mykiss	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
	Acute algae toxicity	ErC50	10 mg/l	72 h	Pseudokirchneriella subcapitata	Publication (2003)	OECD Guideline 201
	Acute crustacea toxicity	EL50 mg/l	7,385	48 h	Daphnia magna	CONCAWE, Brussels, Belgium (2010)	The aquatic toxicity was estimated by a
128-39-2	2,6-di-tert-butylphenol						
	Acute fish toxicity	LC50	1,4 mg/l	96 h	Pimephales promelas	REACh Registration Dossier	OECD Guideline 204
	Acute crustacea toxicity	EC50 mg/l	0,45	48 h	Daphnia magna	REACh Registration Dossier	other: US EPA TSCA as cited Fed. Registe
	Crustacea toxicity	NOEC mg/l	0,035	21 d	Daphnia magna	REACh Registration Dossier	OECD Guideline 211
	Acute bacteria toxicity	(> 1000 mg/l)		3 h	a mixed population of activated sewage sludge micr	REACh Registration Dossier	OECD Guideline 209
1330-78-5	Tris(methylphenyl) phosphate						

	Acute fish toxicity	LC50 0,6 mg/l	96 h	rainbow trout and fathead minnow	Study report (1979)	Five nominal concentrations of sample; a
	Acute crustacea toxicity	EC50 0,146 mg/l	48 h	Daphnia magna	Study report (2005)	OECD Guideline 202
	Fish toxicity	NOEC 0,01 mg/l	28 d	Jordanella floridae	Rijksinstituut voor Volksgezondheid en M	Test was carried out based on the nation
	Crustacea toxicity	NOEC 0,1 mg/l	21 d	Daphnia magna	Rijksinstituut voor Volksgezondheid en M	other: NEN 6502
	Acute bacteria toxicity	(> 1000 mg/l)	3 h	activated sludge, domestic	Study report (2010)	OECD Guideline 209
121158-58-5	phenol, dodecyl-, branched					
	Acute fish toxicity	LL50 40 mg/l	96 h	Pimephales promelas	Study report (1994)	OECD Guideline 203
	Acute algae toxicity	ErC50 0,15 mg/l	72 h	Desmodesmus subspicatus	Study report (2005)	OECD Guideline 201
	Acute crustacea toxicity	EC50 0,037 mg/l	48 h	Daphnia magna	Study report (2005)	OECD Guideline 202
	Fish toxicity	NOEC 0,0037 mg/l	21 d	Daphnia magna (Big water flea)	ECHA Dossier	
	Crustacea toxicity	NOEC 0,004 mg/l	21 d	Daphnia magna	Study report (2005)	OECD Guideline 211
	Acute bacteria toxicity	(> 1000 mg/l)	3 h	activated sludge of a predominantly industrial sew	Study report (2004)	OECD Guideline 209
91-20-3	naphthalene					
	Acute fish toxicity	LC50 1,6 mg/l	96 h	Oncorhynchus mykiss	Arch. Environm. Contam. Toxicol. 11, 487	OECD Guideline 203
	Acute algae toxicity	ErC50 ca. 0,4 - ca. 0,5 mg/l	72 h	Skeletonema costatum	Mar Environ Res 11, 183-200 (1984)	Aquatic toxicity of water soluble fracti
	Acute crustacea toxicity	EC50 2,16 mg/l	48 h	Daphnia magna	Transactions of the American Fisheries S	OECD Guideline 202
	Fish toxicity	NOEC 0,37 mg/l	40 d	Oncorhynchus kisutch	Trans. Am. Fish. Soc. 110:430-436, 1981	Coho salmon fry were exposed for 40 days
	Crustacea toxicity	NOEC 0,59 mg/l	125 d	Daphnia pulex	Can. J . Fish. Aquat. Sci. 39: 830 - 834	During chronic studies in closed static

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
121158-58-5	phenol, dodecyl-, branched			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	25%	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
128-39-2	2,6-di-tert-butylphenol	4,5
1330-78-5	Tris(methylphenyl) phosphate	ca. 860000
121158-58-5	phenol, dodecyl-, branched	7,14
91-20-3	naphthalene	3,4

BCF

CAS No	Chemical name	BCF	Species	Source
128-39-2	2,6-di-tert-butylphenol	135 - 360	Cyprinus carpio	Publication (1992)
1330-78-5	Tris(methylphenyl) phosphate	77	Not applicable - QSAR	QSAR
121158-58-5	phenol, dodecyl-, branched	289	Oncorhynchus mykiss	Study report (2006)

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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, Entry 30

2010/75/EU (VOC): 0,009 % (0,076 g/l)

2004/42/EC (VOC): 0,108 % (0,909 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,12,13,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu
VOC: Volatile Organic Compounds

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Asp. Tox. 1; H304	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.

H360	May damage fertility or the unborn child.
H360F	May damage fertility.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
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

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly 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.)