Safety Data Sheet

ASTRON ATF MB 17

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

1.1. Product identifier

ASTRON ATF MB 17

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

Use of the substance/mixture

gear 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

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard statements

H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of reach of children.
P273	Avoid release to the environment.
P501	Dispose of contents / container in accordance with official regulations.

Special labelling of certain mixtures

EUH208	Contains Reaction products of amines, dicoco alkyl and glycollic acid, 3 -(dicocoalkylamino)-1,2-propanediol, 1-(tert-dodecylthio)propan-2-ol, 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation of base oils and additives.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich			1 - 1,49 %
	800-172-4		01-2119969520-35	
	Aquatic Chronic 2; H411			
	Reaction products of amines, dicoco alkyl and glycollic acid			0,1 - 0,99 %
	471-920-1		01-0000019770-68	
	Skin Sens. 1B; H317			
	3-(dicocoalkylamino)-1,2-propanediol			0,1 - 0,99 %
	482-000-4		01-0000020142-86	
	Skin Sens. 1B, Aquatic Chronic 3; H317 H412			
67124-09-8	1-(tert-dodecylthio)propan-2-ol			0,1 - 0,75 %
	266-582-5		01-2119953277-30	
	Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410			
	Benzene, polypropene derivatives, sulfonated, calcium salts			0,1 - 0,24 %
			01-2120040541-70	
	Skin Sens. 1; H317			
	2-tetradecyloxirane, reaction products with boric acid			0,1 - 0,24 %
	701-392-2		01-2119976364-28	
	Skin Sens. 1B; H317			
29385-43-1	Methyl-1H-benzotriazole			0,1 - 0,24 %
	249-596-6		01-2119979081-35	
	Repr. 2, Acute Tox. 4, Aquatic Chronic 2; H361d H302 H411			
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.			0,01 - 0,035 %
	620-540-6		01-2119510877-33	
	Acute Tox. 4, Skin Corr. 1C, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H400 H410			
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol			0,01 - 0,015 %
	202-414-9		01-2119777867-13	
	Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H318 H373 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		
398141-87-2	800-172-4	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	1 - 1,49 %
	dermal: LD50 = > 4000 - < 8000 mg/kg; oral: LD50 = >10000 mg/kg		
	471-920-1	Reaction products of amines, dicoco alkyl and glycollic acid	0,1 - 0,99 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2500 mg/kg Skin Sens. 1B; H317: >= 9,4 - 100		
67124-09-8	266-582-5	1-(tert-dodecylthio)propan-2-ol	0,1 - 0,75 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
		Benzene, polypropene derivatives, sulfonated, calcium salts	0,1 - 0,24 %
	Skin Sens. 1; H317: >= 10 - 100		
	701-392-2	2-tetradecyloxirane, reaction products with boric acid	0,1 - 0,24 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 16000 mg/kg		
29385-43-1	249-596-6	Methyl-1H-benzotriazole	0,1 - 0,24 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = ca. 720 mg/kg		
1218787-32-6	620-540-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.	0,01 - 0,035 %
	oral: LD50 = 1500 mg/kg Aquatic Acute 1; H400: M=10		
95-38-5	202-414-9	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	0,01 - 0,015 %
	oral: LD50 = ca. 1000 mg/kg Aquatic Acute 1; H400: M=10		

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

High power water jet.

5.2. Special hazards arising from the substance or mixture

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

- Carbon monoxide (CO)
- Carbon dioxide (CO2).
- 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 advice

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

No special measures are necessary.

Further information on storage conditions

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

7.3. Specific end use(s)

gear oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich			
Worker DNEL, long-term		inhalation	systemic	24,7 mg/m³
Worker DNEL, long-term		dermal	systemic	350 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,35 mg/m³
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
67124-09-8	1-(tert-dodecylthio)propan-2-ol			
Worker DNEL, long-term		inhalation	systemic	11,8 mg/m³
Worker DNEL, long-term		dermal	systemic	3,34 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,9 mg/m³
Consumer DNEL, long-term		dermal	systemic	1,67 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,84 mg/kg bw/day
	2-tetradecyloxirane, reaction products with boric acid			
Worker DNEL, long-term		dermal	local	0,09 mg/cm²
Consumer DNEL, long-term		dermal	local	4,68 mg/cm²
29385-43-1	Methyl-1H-benzotriazole			
Worker DNEL, long-term		inhalation	systemic	21,2 mg/m³
Worker DNEL, long-term		dermal	systemic	0,3 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,01 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,01 mg/kg bw/day
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.			
Worker DNEL, long-term		inhalation	systemic	2,96 mg/m³
Worker DNEL, long-term		dermal	systemic	0,42 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,522 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,15 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,15 mg/kg bw/day
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol			
Worker DNEL, long-term		inhalation	systemic	0,46 mg/m³
Worker DNEL, acute		inhalation	systemic	14 mg/m³
Worker DNEL, long-term		dermal	systemic	0,06 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	2 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	
Freshwater		0,0024 mg/l
Freshwater (intermittent releases)		0,024 mg/l
Marine water		0,00033 mg/l
Freshwater sediment		0,433 mg/kg
Marine sediment		0,0596 mg/kg
Secondary poisoning		111,11 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,0853 mg/kg
	Reaction products of amines, dicoco alkyl and glycollic acid	
Freshwater		0,4 mg/l
Freshwater (intermittent releases)		0,013 mg/l
Marine water		0,04 mg/l
Freshwater sediment		17100 mg/kg
Marine sediment		1701 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		3416 mg/kg
67124-09-8	1-(tert-dodecylthio)propan-2-ol	
Freshwater		0,006 mg/l
Freshwater (intermittent releases)		0,006 mg/l
Marine water		0,001 mg/l
Freshwater sediment		8,28 mg/kg
Marine sediment		0,828 mg/kg
Secondary poisoning		33,33 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,244 mg/kg
	2-tetradecyloxirane, reaction products with boric acid	
Freshwater		1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,1 mg/l
Freshwater sediment		42700 mg/kg
Marine sediment		4270 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		8540 mg/kg
29385-43-1	Methyl-1H-benzotriazole	
Freshwater		0,008 mg/l
Freshwater (intermittent releases)		0,086 mg/l

Marine water	0,02 mg/l
Freshwater sediment	0,117 mg/kg
Marine sediment	0,292 mg/kg
Micro-organisms in sewage treatment plants (STP)	39,4 mg/l
Soil	0,0187 mg/kg
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.
Freshwater	0,000214 mg/l
Freshwater (intermittent releases)	0,00087 mg/l
Marine water	0,000021 mg/l
Freshwater sediment	1,692 mg/kg
Marine sediment	0,169 mg/kg
Secondary poisoning	2 mg/kg
Micro-organisms in sewage treatment plants (STP)	1,5 mg/l
Soil	5 mg/kg
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol
Freshwater	0 mg/l
Freshwater (intermittent releases)	0 mg/l
Marine water	0 mg/l
Freshwater sediment	0,376 mg/kg
Marine sediment	0,038 mg/kg
Micro-organisms in sewage treatment plants (STP)	0,26 mg/l
Soil	0,075 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls


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. 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.

Respiratory protection

Usually no personal respirative protection necessary.
In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Pour point:	not determined
Flash point:	> 180 °C

Flammability

Solid/liquid:	not determined

Explosive properties

The product is not: Explosive. Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties

The product is not: oxidising.

Vapour pressure:	not determined
Density (at 15 °C):	0,849 g/cm³
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)	21 mm²/s
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

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)
- Pyrolysis products, toxic

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
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich				
	oral	LD50 >10000 mg/kg	Rat		
	dermal	LD50 > 4000 - < 8000 mg/kg	Rabbit	Study report (1975)	other: US 16 CFR 1500.3 Federal Hazardou
	Reaction products of amines, dicoco alkyl and glycollic acid				
	oral	LD50 > 2500 mg/kg	Rat	Study report (2006)	OECD Guideline 423
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2006)	OECD Guideline 402
67124-09-8	1-(tert-dodecylthio)propan-2-ol				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1982)	other: Section 1500.3 – Federal Hazardou
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1991)	OECD Guideline 434
	2-tetradecyloxirane, reaction products with boric acid				
	oral	LD50 > 16000 mg/kg	Rat	Study report (1981)	other: Section 772.112-21 CFR 40.
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2012)	OECD Guideline 402
29385-43-1	Methyl-1H-benzotriazole				
	oral	LD50 ca. 720 mg/kg	Rat	Study report (1983)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1984)	OECD Guideline 402
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.				
	oral	LD50 1500 mg/kg	Rat	Study report (1984)	OECD Guideline 425
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol				
	oral	LD50 ca. 1000 mg/kg	Rat	Study report (1989)	OECD Guideline 401

Irritation and corrosivity

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

Sensitising effects

Contains Reaction products of amines, dicoco alkyl and glycollic acid, 3-(dicocoalkylamino)-1,2-propanediol, 1-(tert-dodecylthio)propan-2-ol, 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.

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

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

11.2. Information on other hazards

Endocrine disrupting properties

See section: 12.6

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
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich						
	Acute fish toxicity	LC50	3,3 mg/l	96 h	Cyprinodon variegatus	REACh Registration Dossier	other: OECD Test Guidelines
	Acute algae toxicity	ErC50	63 mg/l	96 h			
	Acute crustacea toxicity	EC50	4,6 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202
	Acute bacteria toxicity	(EC50	> 10000 mg/l)	3 h	activated sludge of a predominantly domestic sewag	REACh Registration Dossier	OECD Guideline 209
	Reaction products of amines, dicoco alkyl and glycollic acid						
	Acute fish toxicity	LL50	610 mg/l	96 h	Oncorhynchus mykiss	Study report (2006)	OECD Guideline 203
	Acute algae toxicity	ErC50	> 160 mg/l	72 h	Desmodesmus subspicatus	Study report (2006)	OECD Guideline 201
	Acute crustacea toxicity	EC50	77 mg/l	48 h	Daphnia magna	Study report (2007)	OECD Guideline 202
	Crustacea toxicity	NOEC	56 mg/l	21 d	Daphnia magna	Study report (2006)	OECD Guideline 211
	Acute bacteria toxicity	(EC50	> 1000 mg/l)	3 h	activated sludge of a predominantly domestic sewag	Study report (2006)	OECD Guideline 209
67124-09-8	1-(tert-dodecylthio)propan-2-ol						
	Acute fish toxicity	LL50	0,75 mg/l	96 h	Oncorhynchus mykiss	Study report (2004)	OECD Guideline 203
	Acute algae toxicity	ErC50	> 100 mg/l	96 h	Desmodesmus subspicatus	Study report (2004)	OECD Guideline 201
	Acute crustacea toxicity	EL50	0,58 mg/l	48 h	Daphnia magna	Study report (2011)	OECD Guideline 202
	Crustacea toxicity	NOEC	0,32 mg/l	21 d	Daphnia magna	Study report (2003)	OECD Guideline 211
	Acute bacteria toxicity	(EC50	> 10000 mg/l)	3 h	Activated sludge	Study report (1994)	OECD Guideline 209
	2-tetradecyloxirane, reaction products with boric acid						
	Acute fish toxicity	LL50	> 100 mg/l	96 h	Oncorhynchus mykiss	REACh Registration Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50	> 100 mg/l	72 h	Raphidocelis subcapitata	Study report (2012)	OECD Guideline 201
	Acute crustacea toxicity	EL50	> 100 mg/l	48 h	Daphnia magna	Study report (2012)	OECD Guideline 202
	Fish toxicity	NOEC	> 100 mg/l	33 d	Pimephales promelas	REACh Registration Dossier	OECD Guideline 210
	Acute bacteria toxicity	(EC50	> 10000 mg/l)	3 h	activated sludge of a predominantly domestic sewag	Study report (1994)	OECD Guideline 209

29385-43-1	Methyl-1H-benzotriazole						
	Acute fish toxicity	LC50	55 mg/l	96 h	Cyprinodon variegatus	Study report (2003)	other: The test procedure is based on te
	Acute algae toxicity	ErC50	75 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1994)	OECD Guideline 201
	Acute crustacea toxicity	EC50	15,8 mg/l	48 h	other aquatic crustacea: Daphnia galeata	Environ Sci Pollut Res 19:1781-1790 (201	OECD Guideline 202
	Crustacea toxicity	NOEC	18,4 mg/l	21 d	Daphnia magna	Study report (1995)	other: "Daphnia Reproduction Test" of OE
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.						
	Acute fish toxicity	LC50	0,6 mg/l	96 h	Danio rerio	Study report (1990)	OECD Guideline 203
	Acute algae toxicity	ErC50	0,0867 mg/l	72 h	Raphidocelis subcapitata	Study report (2010)	OECD Guideline 201
	Crustacea toxicity	NOEC	0,32 mg/l	21 d	Daphnia magna	Study report (2010)	OECD Guideline 211
	Acute bacteria toxicity	(EC50	167 mg/l)	3 h	activated sludge of a predominantly domestic sewag	Study report (2010)	OECD Guideline 209
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol						
	Acute algae toxicity	ErC50	0,03 mg/l	72 h	Desmodesmus subspicatus	REACh Registration Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50	0,163 mg/l	48 h	Daphnia magna	REACh Registration Dossier	OECD Guideline 202

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	4,11
	Reaction products of amines, dicoco alkyl and glycollic acid	> 9,4
67124-09-8	1-(tert-dodecylthio)propan-2-ol	> 4,72 - < 6,51
	2-tetradecyloxirane, reaction products with boric acid	>= 6,24 - 9,4
29385-43-1	Methyl-1H-benzotriazole	1,079
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.	3,6
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	7,51

BCF

CAS No	Chemical name	BCF	Species	Source
398141-87-2	Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	31	Cyprinus carpio	REACh Registration D
	Reaction products of amines, dicoco alkyl and glycollic acid	< 191	Cyprinus carpio	Study report (2007)
67124-09-8	1-(tert-dodecylthio)propan-2-ol	105,5	Fish, not further specified	EPIWIN calculation (
1218787-32-6	Ethanol, 2,2'-iminobis-, N-(C16-18 and C18-unsatd. alkyl) derivs.	20,2		QSAR result (2010)
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	1890	fish	REACh Registration D

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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

2010/75/EU (VOC):	0,24 % (2,038 g/l)
2004/42/EC (VOC):	0,24 % (2,038 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):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

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
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
For abbreviations and acronyms, see table at http://abbrev.esdscom.eu
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.
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.
EUH208	Contains Reaction products of amines, dicoco alkyl and glycollic acid, 3 -(dicocoalkylamino)-1,2-propanediol, 1-(tert-dodecylthio)propan-2-ol, 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.

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.)