

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

SRS ViVA 1 ecosynth

Revision date: 28.12.2018

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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

engine oil

Uses advised against

none

1.3. Details of the supplier of the safety data sheet

Company name: SRS Schmierstoff Vertrieb GmbH
Street: Neuenkirchener Straße 8
Place: D-48497 Salzbergen
Telephone: 05976 - 945-0
Responsible Department: Abt. Produktsicherheit: info.reach@srs-oil.de

1.4. Emergency telephone number: Gift-Informationszentrum Nord (Göttingen)
Telefon 0551-19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements**Regulation (EC) No. 1272/2008****Special labelling of certain mixtures**

EUH208 Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3. Other hazards

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

This mixture contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic			35 - < 40 %
	265-157-1	649-467-00-8	01-2119484627-25	
	Asp. Tox. 1; H304			
68037-01-4	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated			35 - < 40 %
	500-183-1		01-2119486452-34	
	Asp. Tox. 1; H304			
147880-09-9	Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolysisobutenyl derivs.			1 - < 5 %

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	604-611-9			
	Aquatic Chronic 4; H413			
36878-20-3	Bis(nonylphenyl)amine			1 - < 5 %
	253-249-4		01-2119488911-28	
	Aquatic Chronic 4; H413			
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased			1 - < 5 %
	272-234-3		01-2119524004-56	
	Aquatic Chronic 4; H413			
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			1 - < 5 %
	272-238-5		01-2119657973-23	
	Eye Dam. 1, Aquatic Chronic 2; H318 H411			

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

Further Information

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

After contact with skin

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

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed or in the event of vomiting, risk of entering the lungs.

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**

Sand. Foam. Carbon dioxide (CO₂). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

High power water jet

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5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO₂) Sulphur dioxide (SO₂) Nitrogen oxides (NO_x) Phosphorus oxides

5.3. Advice for firefighters

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

Additional information

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

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment (refer to section 8).

Ventilate affected area.

Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. 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.

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Avoid formation of oil dust.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Fire class B

Further information on handling

Do not breathe vapour/aerosol.

Avoid contact with eyes and skin.

Advises on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

Hints on joint storage

Do not store together with: Gas. Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances.

Infectious substances

Further information on storage conditions

Temperature control required. Protect from light. Keep container tightly closed. Do not allow contact with air.

7.3. Specific end use(s)

See section 1.

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SECTION 8: Exposure controls/personal protection**8.1. Control parameters****DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
36878-20-3	Bis(nonylphenyl)amine			
Worker DNEL, acute		dermal	systemic	5 mg/kg bw/day
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased			
Worker DNEL, long-term		inhalation	systemic	3,5 mg/m ³
Worker DNEL, acute		inhalation	systemic	133,6 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,5 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	80 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m ³
Consumer DNEL, acute		inhalation	systemic	0,067 mg/m ³
Consumer DNEL, acute		dermal	systemic	40 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,25 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	50 mg/kg bw/day
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			
Worker DNEL, long-term		inhalation	systemic	2.93 mg/m ³
Worker DNEL, acute		inhalation	systemic	496.4 mg/m ³
Worker DNEL, long-term		dermal	systemic	10.42 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	100 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	11.75 mg/m ³
Consumer DNEL, acute		inhalation	systemic	198.6 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2.1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	50 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0.21 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	29 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic	
Secondary poisoning		9,33 mg/kg
36878-20-3	Bis(nonylphenyl)amine	
Freshwater		0,1 mg/l
Freshwater (intermittent releases)		1 mg/l
Marine water		0,01 mg/l
Marine water (intermittent releases)		13200 mg/kg
Freshwater sediment		132000 mg/kg

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Micro-organisms in sewage treatment plants (STP)	1 mg/l
Soil	263000 mg/kg
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased
Freshwater	0,5 mg/l
Freshwater (intermittent releases)	5 mg/l
Marine water	0,04 mg/l
Freshwater sediment	43500 mg/kg
Marine sediment	3480 mg/kg
Secondary poisoning	13,333 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	8850 mg/kg
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts
Freshwater	0,04 mg/l
Marine water	0,0046 mg/l
Freshwater sediment	0,07 mg/kg
Marine sediment	0,007 mg/kg
Secondary poisoning	8,33 mg/kg
Micro-organisms in sewage treatment plants (STP)	3,8 mg/l
Soil	0,055 mg/kg

Additional advice on limit values

Air limit values::

Possibility of exposure to Aerosol

Limit value = 5 mg/ m3 - Source: ACGIH

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Clean skin thoroughly after working.

Do not put any product-impregnated cleaning rags into your trouser pockets.

Contaminated work clothing should not be allowed out of the workplace.

Wash contaminated clothing before reuse.

Eye/face protection

Safety goggles with side protection. In case of increased risk add protective face shield. DIN EN 166

Hand protection

Use safety gloves of following materials: NBR (nitrile) / neopren / viton (permeationslevel 5 - 6), Cat. II according to norm EN 347/EN 388.

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.

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

Oil-resistant and hardly inflammable protective clothing.

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Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-aerosol or mist formation

-exceeding exposure limit values

Suitable respiratory protection apparatus: Respiratory equipment in case of nebulosity or aerosol: Use a mask with a filter type A2, A2/P2 or ABEK.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

No information available.

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

Physical state:	liquidxxxxx
Colour:	clear
Odour:	characteristic

Test method

pH-Value:	No information available.
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Changes in the physical state

Melting point:	No information available.
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Initial boiling point and boiling range:	No information available.
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Sublimation point:	No information available.
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Softening point:	No information available.
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Pour point:	-48 °C	ISO 3016
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Flash point:	240 °C	COC
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Sustaining combustion:	No data available
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Flammability

Solid:	No information available.
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Gas:	No information available.
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Explosive properties

none

Lower explosion limits:	No information available.	DIN 51649
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Upper explosion limits:	No information available.	DIN 51649
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Ignition temperature:	No information available.
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Auto-ignition temperature

Solid:	No information available.
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Gas:	No information available.
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Decomposition temperature:	No information available.
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Oxidizing properties

none

Vapour pressure:	No information available.
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(at 20 °C)

Vapour pressure:	No information available.
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(at 50 °C)

Density (at 15 °C):	0,845 g/cm ³	DIN 51757
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Bulk density:	No information available.
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Water solubility: Immiscible

Solubility in other solvents

No information available.

Partition coefficient:

No information available.

Viscosity / dynamic:

No information available.

Viscosity / kinematic:
(at 40 °C)81,62 mm²/s DIN EN ISO 3104

Flow time:

No information available.

Vapour density:

No information available.

Evaporation rate:

No information available.

Solvent separation test:

No information available.

Solvent content:

No information available.

9.2. Other information

Solid content:

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable at ambient temperature.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic				
	oral	LD50 mg/kg	>5000	Rat (OECD 401)	ECHA Dossier
	dermal	LD50 mg/kg	>2000	Rabbit (OECD 402)	ECHA Dossier
68037-01-4	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated				
	oral	LD50 mg/kg	>5000	Rat.	ECHA Dossier

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	dermal	LD50 mg/kg	>2000	Rat.	ECHA Dossier	
	inhalation (4 h) aerosol	LC50	>5,2 mg/l	Rat. (OECD 403)	ECHA Dossier	
36878-20-3	Bis(nonylphenyl)amine					
	oral	LD50 mg/kg	>5000	Rat	ECHA Dossier	
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased					
	oral	LD50 mg/kg	> 5000	Rat	ECHA Dossier	OECD Guideline 401
	dermal	LD50 mg/kg	> 4000	Rabbit	ECHA Dossier	OECD Guideline 402
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts					
	oral	LD50 mg/kg	>2000	Rat.	ECHA Dossier	OECD Guideline 401
	dermal	LD50 mg/kg	>5000	Rabbit	ECHA Dossier	OECD Guideline 402

Irritation and corrosivity

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

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts:

Irritant effect on the eye: Not an irritant. By analogy. Raw material classification

Sensitising effects

Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction.

May cause sensitisation especially in sensitive humans.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:

In vitro mutagenicity/genotoxicity Method: OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test); Result: negative. Literature information: ECHA Dossier; Carcinogenicity: Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies); Species: Mouse.; Results: Non-carcinogenic if DMSO extract as measured by IP346 is less than 3% m/m. Literature information: ECHA Dossier; Reproductive toxicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Results: NOAEL > 1000 mg/kg Literature information: ECHA Dossier; Developmental toxicity/teratogenicity: Species: Rat (Sprague-Dawley); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Results: NOAEL >= 2000 mg/kg Literature information: ECHA Dossier

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated:

In vitro mutagenicity/genotoxicity: Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay); Result: negative. Literature information: ECHA Dossier; Reproductive toxicity: Species: Rat; Method: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test); Result: NOAEL > 1000 mg/kg; Literature information: ECHA Dossier

Bis(nonylphenyl)amine:

Developmental toxicity/teratogenicity: Species: Rat (Wistar); Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study); Result: NOAEL >= 500 mg/kg; Literature information: ECHA Dossier

Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased:

Reproductive toxicity: Method: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test); Species: Rat; Result: NOAEL = 200 mg/kg; Literature information: ECHA Dossier; Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay), OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test); Result: negative. ; Literature information: ECHA Dossier; Reproductive toxicity: Method: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study). Species: Rat.; Result: NOAEL = 50 mg/kg. Literature information: ECHA Dossier

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts:

Subacute oral toxicity:

Method: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents); Species: Rat; Exposure

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duration: 28 d; Results: NOAEL = 125mg/kg; Literature information: ECHA Dossier

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.

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic:

Subacute inhalative toxicity: Method: -; Exposure time: 28d; Species: Rat; Results: NOAEL >980 mg/m³;

Literature information: ECHA Dossier; Subacute dermal toxicity: Method: OECD Guideline 410 (Repeated Dose

Dermal Toxicity: 21/28-Day Study); Exposure time: 28d; Species: Rabbit; Results: 1000 mg/kg; Literature

information: ECHA Dossier

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated:

Subchronic oral toxicity: Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Species: Rat; Results: NOAEL 1000 mg/kg; Literature information: ECHA Dossier

Bis(nonylphenyl)amine:

Subchronic oral toxicity: Exposure time: 90d; Species: Han Wistar Rat.; Method: OECD Guideline 408; Result:

LOAEL = 100 mg/kg; Literature information: ECHA Dossier

Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased:

Subacute oral toxicity: Method: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study);

Species: Dog.; Exposure duration: 28 d. Results: NOAEL >250 mg/kg(bw)/day ; Literature information: ECHA

Dossier

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts:

In-vitro mutagenicity:

Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Result: negative. ; Literature information: ECHA Dossier

Aspiration hazard

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

Practical experience**Other observations**

Frequent contact specially if dried out may cause skin and eye irritations.

SECTION 12: Ecological information**12.1. Toxicity**

If this product contains phenol, dodecyl, branched (EC No. 310-154-3), this product is not to be classified as dangerous for the environment (H410, H411, H412). Raw materials containing this substance have not been classified by our suppliers as hazardous to the environment (H410, H411) on the basis of test data, expert judgement or analogy assessments.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic					
	Crustacea toxicity	NOEC 10 mg/l	21 d	Daphnia magna (OECD 211)	ECHA Dossier	
68037-01-4	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated					
	Acute fish toxicity	LC50 >750 mg/l	96 h	Pimephales promelas	MSDS extern	
	Acute crustacea toxicity	EC50 190 mg/l	48 h	Daphnia magna	MSDS extern	
36878-20-3	Bis(nonylphenyl)amine					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Brachydanio rerio (new name: Danio rerio) (OECD 20)	ECHA Dossier	
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna (OECD 202)	ECHA Dossier	
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased					

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	Acute fish toxicity	LC50 >1000 mg/l	LL50	96 h	Pimephales promelas	ECHA Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 500	96 h	Pseudokirchneriella subcapitata	Study report (1994)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna	Study report (1993)	OECD Guideline 202
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts						
	Acute fish toxicity	LC50 4,4 mg/l	LL50 =	96 h	Oncorhynchus mykiss	ECHA Dossier	OECD Guideline 203
	Acute algae toxicity	ErC50 410 mg/l	EL50 =	72 h	Desmodesmus subspicatus	ECHA Dossier	OECD Guideline 201
	Acute crustacea toxicity	EC50 75 mg/l	EL50 =	48 h	Daphnia magna	ECHA Dossier	OECD Guideline 202
	Crustacea toxicity	NOEC	0,4 mg/l	21 d	Daphnia magna	ECHA Dossier	OECD Guideline 211

12.2. Persistence and degradability

The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64742-54-7	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	31%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	2-4%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
68037-01-4	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated			
	OECD 301D / EEC 92/69 annex V, C.4-E	2 %	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
36878-20-3	Bis(nonylphenyl)amine			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	1%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C (READ ACROSS)	13,4 %	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
68784-31-6	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts			
	EU Method C.6	< 5%	27	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
68037-01-4	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	>6,5
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased	9,5

BCF

CAS No	Chemical name	BCF	Species	Source
68784-26-9	Phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased	2,2	lipid triolein	ECHA Dossier

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12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

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

Informations for safe handling see chapter 7.

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Informations for personal protective equipment see chapter 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

Observe in addition any national regulations!

National regulatory information**Additional information**

Water hazard class (WGK) = 2

15.2 Chemical Safety Assessment
not applicable.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 9.

Rev. : 1,0 - 16.04.2015

Rev. : 1,1 - 29.04.2016

Rev. : 1,11 - 24.05.2016

Rev. : 2,0 - 12.06.2017

Rev. : 3,0 - 28.06.2018

Rev. : 3,1 - 28.12.2018

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

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PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuerGefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrungsklasse

Relevant H and EUH statements (number and full text)

H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH208	Contains Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data.

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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)