

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

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Mabanol Xenon Alpha Synth 0W-40

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

1.1. Product identifier

Trade name/designation:

Mabanol Xenon Alpha Synth 0W-40

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

Use of the substance/mixture:

Motor oil

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Mabanol GmbH & Co. KG

Koreastraße 7
20457 Hamburg
Germany

Telephone: 0049 (0) 40 36809988

E-mail: info@mabanol.com

Website: www.mabanol.com

E-mail (competent person): giznord@giz-nord.de

1.4. Emergency telephone number

Giftinformationszentrale Göttingen , 24h: 0049 (0) 551 1 92 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

* 2.2. Label elements

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

Hazard components for labelling:

Phenol, dodecyl-, branched; Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts; Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic; Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated

Supplemental hazard information

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

Other adverse effects:

Endocrine disrupting properties: Phenol, dodecyl-, branched.

The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII: Phenol, dodecyl-, branched.

Phenol, dodecyl-, branched: This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.

SECTION 3: Composition/information on ingredients

* 3.2. Mixtures

Additional information:

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

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method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 64742-54-7 EC No.: 265-157-1 REACH No.: 01-2119484627-25	Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic Asp. Tox. 1 (H304) Danger	35 - < 40 weight-%
CAS No.: 68037-01-4 EC No.: 500-183-1 REACH No.: 01-2119486452-34	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated Asp. Tox. 1 (H304) Danger	35 - < 40 weight-%
CAS No.: 64741-88-4	Highly refined mineral oil (C15-C50)* Asp. Tox. 1 (H304) Danger	15 - < 20 weight-%
CAS No.: 68784-31-6 EC No.: 272-238-5 REACH No.: 01-2119657973-23	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts Aquatic Chronic 2 (H411), Eye Dam. 1 (H318) Danger	1 - < 3 weight-%
CAS No.: 68784-26-9 EC No.: 272-234-3 REACH No.: 01-2119524004-56	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased Aquatic Chronic 4 (H413)	1 - < 3 weight-%
CAS No.: 722503-68-6 EC No.: 682-816-2	Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts Skin Sens. 1B (H317) Warning	0.5 - < 1 weight-%
CAS No.: 121158-58-5 EC No.: 310-154-3 Index No.: 604-092-00-9 REACH No.: 01-2119513207-49	Phenol, dodecyl-, branched <i>Candidate List of Substances of Very High Concern for Authorisation!</i> Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Repr. 1B (H360F), Skin Corr. 1C (H314) Danger M-factor (acute): 10 M-factor (chronic): 10	0.1 - < 0.2 weight-%

Full text of H- and EUH-phrases: see section 16.

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).

Following inhalation:

Remove casualty to fresh air and keep warm and at rest. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

In case of skin contact:

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 eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. If eye irritation persists: Get medical advice/attention.

Following 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

Observe risk of aspiration if vomiting occurs.

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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:

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

Unsuitable extinguishing media:

Full water jet.

5.2. Special hazards arising from the substance or mixture

Burning produces heavy smoke.

Hazardous combustion products:

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO₂). Sulphur dioxide (SO₂). Nitrogen oxides (NO_x). Phosphorus oxides.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases. In case of fire: Wear self-contained breathing apparatus.

5.4. 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

6.1.1. For non-emergency personnel

Personal precautions:

Use personal protection equipment. Ventilate affected area. Special danger of slipping by leaking/spilling product.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

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 cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Avoid: Generation/formation of mist. generation/formation of aerosols.

Fire prevent measures:

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.
Fire class: B (Fires of liquids or liquid turning substances).

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Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin. Wash hands before breaks and after work. Apply skin care products after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Used working clothes should not be worn outside the work area. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

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

Hints on storage assembly:

Do not store together with: Gas. Explosives. P8 OXIDISING LIQUIDS AND SOLIDS. Radioactive substances. Infectious substances.

Storage class (TRGS 510, Germany): 10 - Combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Temperature control required. Keep container tightly closed.
Protect against: UV-radiation/sunlight. Light. Air.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

* 8.1. Control parameters

8.1.1. Occupational exposure limit values

No data available

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	2.93 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	11.75 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	496.4 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	198.6 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	10.42 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

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Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	2.1 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	100 mg/kg bw/day	① DNEL worker ② Acute - dermal, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	50 mg/kg bw/day	① DNEL Consumer ② Acute - dermal, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.21 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	29 mg/kg bw/day	① DNEL Consumer ② Acute - oral, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	3.5 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.87 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	133.6 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.067 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.5 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	80 mg/kg bw/day	① DNEL worker ② Acute - dermal, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	40 mg/kg bw/day	① DNEL Consumer ② Acute - dermal, systemic effects
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.25 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

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Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	50 mg/kg bw/day	① DNEL Consumer ② Acute - oral, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	1.762 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.79 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	44.18 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	13.26 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.25 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.075 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	166 mg/kg bw/day	① DNEL worker ② Acute - dermal, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	50 mg/kg bw/day	① DNEL Consumer ② Acute - dermal, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.075 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	1.26 mg/kg bw/day	① DNEL Consumer ② Acute - oral, systemic effects

Substance name	PNEC Value	① PNEC type
Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic CAS No.: 64742-54-7 EC No.: 265-157-1	9.33 mg/kg	① PNEC secondary poisoning
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.04 mg/L	① PNEC aquatic, freshwater
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.0046 mg/L	① PNEC aquatic, marine water
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	3.8 mg/L	① PNEC sewage treatment plant

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Substance name	PNEC Value	① PNEC type
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.07 mg/kg	① PNEC sediment, freshwater
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.007 mg/kg	① PNEC sediment, marine water
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	0.055 mg/kg	① PNEC soil
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5	8.33 mg/kg	① PNEC secondary poisoning
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.5 mg/L	① PNEC aquatic, freshwater
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	0.04 mg/L	① PNEC aquatic, marine water
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	100 mg/L	① PNEC sewage treatment plant
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	43,500 mg/kg	① PNEC sediment, freshwater
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	3,480 mg/kg	① PNEC sediment, marine water
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	8,650 mg/kg	① PNEC soil
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3	13,333 mg/kg	① PNEC secondary poisoning
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.000074 mg/L	① PNEC aquatic, freshwater
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.000007 mg/L	① PNEC aquatic, marine water
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	100 mg/L	① PNEC sewage treatment plant
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.226 mg/kg	① PNEC sediment, freshwater

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Substance name	PNEC Value	① PNEC type
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.027 mg/kg	① PNEC sediment, marine water
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	0.118 mg/kg	① PNEC soil
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3	4 mg/kg	① PNEC secondary poisoning

* 8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation.

8.2.2. Personal protection equipment



Eye/face protection:

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

Skin protection:

Tested protective gloves must be worn (EN ISO 374).

Suitable material: NBR (Nitrile rubber). FKM (fluoro rubber). CR (polychloroprene, chloroprene rubber). Breakthrough times and swelling properties of the material must be taken into consideration. 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.

Suitable protective clothing: flame-resistant.

Respiratory protection:

Usually no personal respirative protection necessary.

Respiratory protection necessary at: exceeding exposure limit values. aerosol or mist formation. Suitable respiratory protection apparatus: Filtering device (full mask or mouthpiece) with filter: A2, A2/P2, 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.

8.2.3. Environmental exposure controls

No information available.

8.3. Additional information

Air limit values:

Possibility of exposure to Aerosol (Mineral oil)

Limit value (TLV-TWA) = 5 mg/ m3 - Source: ACGIH

Limit value (TLV-STEL) = 10 mg/ m3 - Source: ACGIH

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: clear

Odour: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	not determined		
Melting point	not determined		

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Parameter	Value	at °C	① Method ② Remark
Freezing point	not determined		
Initial boiling point and boiling range	not determined		
Decomposition temperature	not determined		
Flash point	240 °C		① COC
Evaporation rate	not determined		
Auto-ignition temperature	not determined		
Upper/lower flammability or explosive limits	not determined		
Vapour pressure	not determined		
Vapour density	not determined		
Density	0.845 g/cm ³	15 °C	① DIN 51757
Relative density	not determined		
Bulk density	not determined		
Water solubility	Immiscible		
Partition coefficient: n-octanol/water	not determined		
Dynamic viscosity	not determined		
Kinematic viscosity	81.62 mm ² /s	40 °C	① EN ISO 3104
Pour point	-48 °C		① ISO 3016

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

* 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic CAS No.: 64742-54-7
EC No.: 265-157-1

LD₅₀ oral: >5,000 mg/kg (Rat) OECD 401

LD₅₀ dermal: >2,000 mg/kg (Rabbit) OECD 402

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated CAS No.: 68037-01-4
EC No.: 500-183-1

LD₅₀ oral: >5,000 mg/kg (Rat)

LD₅₀ dermal: >2,000 mg/kg (Rat)

LC₅₀ Acute inhalation toxicity (vapour): >5.2 mg/L 4 h (Rat) OECD 403

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Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5
LD ₅₀ oral: >2,000 mg/kg (Rat) OECD 401
LD ₅₀ dermal: >5,000 mg/kg (Rabbit) OECD 402
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3
LD ₅₀ oral: >5,000 mg/kg (Rat) OECD 401
LD ₅₀ dermal: >4,000 mg/kg (Rabbit) OECD 402
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3
LD ₅₀ oral: 2,100 mg/kg (Rat) OECD 401
LD ₅₀ dermal: 15,000 mg/kg (Rabbit) OECD 402

Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

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

Serious eye damage/irritation:

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

Respiratory or skin sensitisation:

May cause sensitisation especially in sensitive humans.

Germ cell mutagenicity:

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

Carcinogenicity:

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

Reproductive toxicity:

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

STOT-single exposure:

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

STOT-repeated exposure:

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

Aspiration hazard:

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

Additional information:

Frequently or prolonged contact with skin may cause dermal irritation.

11.2. Information on other hazards

Endocrine disrupting properties:

Endocrine disrupting properties: Phenol, dodecyl-, branched.

No information available.

SECTION 12: Ecological information

* 12.1. Toxicity

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic CAS No.: 64742-54-7 EC No.: 265-157-1
NOEC: 10 mg/L 21 d (crustaceans, Daphnia magna (Big water flea)) OECD 211
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
LC ₅₀ : >1,000 mg/L 4 d (fish, Pimephales promelas (fathead minnow)) USEPA (1975)
EC ₅₀ : >1,000 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202
NOEC: 125 mg/L 21 d (crustaceans, Daphnia magna (Big water flea))

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Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5
LC ₅₀ : 4.4 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) OECD 203
EC ₅₀ : 75 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202
ErC ₅₀ : 410 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201
NOEC: 0.4 mg/L 21 d (crustaceans, Daphnia magna (Big water flea)) OECD 211
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3
LC ₅₀ : >1,000 mg/L 4 d (fish, Pimephales promelas (fathead minnow)) OECD 203
ErC ₅₀ : >500 mg/L 4 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
EC ₅₀ : >1,000 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3
LC ₅₀ : 40 mg/L 4 d (fish, Pimephales promelas (fathead minnow))
NOEC: 0.0037 mg/L 21 d (crustaceans, Daphnia magna (Big water flea))
ErC ₅₀ : 0.36 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)

Additional ecotoxicological information:

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 on the basis of test data, expert judgement or analogy assessments. (H410, H411).

* 12.2. Persistence and degradability

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic CAS No.: 64742-54-7 EC No.: 265-157-1
Biodegradation: —
Remark: Not readily biodegradable (according to OECD criteria).
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
Biodegradation: —
Remark: Not readily biodegradable (according to OECD criteria)
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5
Biodegradation: —
Remark: Readily biodegradable (according to OECD criteria).
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3
Biodegradation: —
Remark: Not readily biodegradable (according to OECD criteria)
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3
Biodegradation: —
Remark: Not readily biodegradable (according to OECD criteria).

Additional information:

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

* 12.3. Bioaccumulative potential

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
Log K_{OW}: > 6.5
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3
Log K_{OW}: 9.5
Bioconcentration factor (BCF): 2.2 Species: lipid triolein
Phenol, dodecyl-, branched CAS No.: 121158-58-5 EC No.: 310-154-3
Log K_{OW}: 7.1
Bioconcentration factor (BCF): 2.9

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Accumulation / Evaluation:

No indication of bioaccumulation potential.

12.4. Mobility in soil

No information available.

* 12.5. Results of PBT and vPvB assessment

Baseoil - unspecified, Distillates (petroleum), hydrotreated heavy paraffinic CAS No.: 64742-54-7 EC No.: 265-157-1
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Highly refined mineral oil (C15-C50)* CAS No.: 64741-88-4
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts CAS No.: 68784-31-6 EC No.: 272-238-5
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased CAS No.: 68784-26-9 EC No.: 272-234-3
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts CAS No.: 722503-68-6 EC No.: 682-816-2
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The mixture contains the following substances fulfilling the PBT-vPvB criteria according to REACH Annex XIII:

Phenol, dodecyl-, branched.

* 12.6. Endocrine disrupting properties

Endocrine disrupting properties: Phenol, dodecyl-, branched.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code packaging

15 01 10 *	packaging containing residues of or contaminated by dangerous substances
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*: Evidence for disposal must be provided.

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

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

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SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

14.7. Maritime transport in bulk according to IMO instruments

not relevant.

SECTION 15: Regulatory information

* 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU legislation

Authorisations:

Contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH:

Phenol, dodecyl-, branched.

Restrictions on use:

Use restriction according to REACH annex XVII, no.: 28. 30. 75.

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]: No information available.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds: No information available.

Observe in addition any national regulations!

15.1.2. National regulations

[DE] National regulations

Störfallverordnung

for substances contained in the product:

This product is not assigned to a hazard category.

Technische Anleitung Luft (TA-Luft)

Klasse 1:

5.2.5: organic substances, to be indicated as total carbon at $m \geq 0.50$ kg/h: conc. 50 mg/m³

Anteil 1:

60 %

Water hazard class

WGK:

2 - deutlich wassergefährdend

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Remark:

Self-classification (mixture; calculation rule).

15.2. Chemical Safety Assessment

not applicable.

15.3. Additional information

Regulation (EU) 649/2012 (PIC): not relevant.

SECTION 16: Other information

* 16.1. Indication of changes

2.2.	Label elements
2.3.	Other hazards
3.2.	Mixtures
8.1.	Control parameters
8.2.	Exposure controls
10.2.	Chemical stability
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes

16.2. Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: Accord européen sur le transport des marchandises dangereuses par Route (International Carriage of Dangerous Goods by Road)

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

NIOSH: National Institute of Occupational Safety and Health

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OEL: Occupational Exposure limit (Arbeitsplatzgrenzwert)

OSHA: Occupational Safety and Health Administration

PEL: permissible exposure limit (Zulässiger Expositionsgrenzwert)

PBT: persistent bioaccumulative toxic

PNEC: predicted no effect concentration

REL: Recommended exposure limit (Empfohlene Expositionsgrenze)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit (Kurzzzeitgrenzwert) (15 min)
SVHC: substance of very high concern
TLV: Threshold Limit Values (Schwellwert Grenzwerte)
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average (Zeitlich gewichteter Mittelwert) (8 h)
VOC: Volatile Organic Compounds
vPvB: very persistent and very bioaccumulative
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3. Key literature references and sources for data

No data available

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360F	May damage fertility.
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.
H413	May cause long lasting harmful effects to aquatic life.

16.6. Training advice

No data available

16.7. Additional 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.

* Data changed compared with the previous version