

Synmar Empanda 75W-80 FE GL-4

Version number: 3.0
Replaces version of: 2022-09-21 (2)

Revision: 2024-11-27

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

1.1 Product identifier

Trade name **Synmar Empanda 75W-80 FE GL-4**
Article number S300102

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

Relevant identified uses
Lubricant
Professional use
Consumer use

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

Emergency information service +31 (0) 33 303 3044
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (acc. to GB CLP)

This mixture does not meet the criteria for classification.

| Code | Supplemental hazard information |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EUH208 | contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), 2-Ethylhexyl methacrylate. May produce an allergic reaction |
| EUH210 | safety data sheet available on request |

2.2 Label elements

Labelling (acc. to GB CLP)

- signal word Not required.

- pictograms Not required.

- supplemental hazard information

EUH208 Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), 2-Ethylhexyl methacrylate. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

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SECTION 3: Composition/information on ingredients**3.1 Substances**

Not relevant (mixture).

3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

REACH information: In order to use the most updated information we have incorporated data available via the public REACH dossier into the safety datasheet. Ingredients in the mixture do not fulfill the tonnage requirements for REACH registration as they are produced and/or imported <1 tonne per year.

| Name of substance | Identifier | Wt% | Classification acc. to GHS | Pictograms | Notes |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | EC No 931-384-6 | 0.1 – 0.99 | Acute Tox. 4 / H302 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Aquatic Chronic 2 / H411 |  | |
| 2-Ethylhexyl methacrylate | CAS No 688-84-6 EC No 211-708-6 | 0.1 – 0.49 | Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1B / H317 STOT SE 3 / H335 Aquatic Chronic 3 / H412 |  | |

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

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

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

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SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media

Water mist; Foam; Dry extinguishing powder; Carbon dioxide (CO₂);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

During fire hazardous fumes/smoke could be produced.

5.3 Advice for firefighters

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

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

For non-emergency personnel

Remove persons to safety. Ventilate affected area. Special danger of slipping by leaking/spilling product.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Bunding. Covering of drains.

Advice on how to clean up a spill

Clean with detergents. Wipe up with absorbent material (e.g. cloth, fleece). Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.). Pump out large quantities.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

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Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

Consideration of other advice

Store in a dry place. Store in a well-ventilated place. Keep container tightly closed.

- specific designs for storage rooms or vessels

- storage temperature

Maximum storage temperature: 40 °C

- maximum storage period

60 ms

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

| Relevant DNELs of components of the mixture | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|------------------------|------------------------------------|-------------------|----------------------------|
| Name of substance | CAS No | End-point | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 4.28 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 12.5 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric | | DNEL | 160 µg/cm ² | human, dermal | worker (industry) | chronic - local effects |

Safety Data Sheet

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

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| Relevant DNELs of components of the mixture | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|------------------------|------------------------------------|-------------------------------|----------------------------|
| Name of substance | CAS No | End-point | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | | | | | |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 160 µg/cm ² | human, dermal | worker (industry) | acute - local effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 1.09 mg/m ³ | human, inhalatory | consumer (private households) | chronic - systemic effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 6.25 mg/kg bw/day | human, dermal | consumer (private households) | chronic - systemic effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 160 µg/cm ² | human, dermal | consumer (private households) | chronic - local effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 160 µg/cm ² | human, dermal | consumer (private households) | acute - local effects |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | DNEL | 0.25 mg/kg bw/day | human, oral | consumer (private households) | chronic - systemic effects |
| 2-Ethylhexyl methacrylate | 688-84-6 | DNEL | 2.5 mg/m ³ | human, inhalatory | worker (industry) | chronic - systemic effects |
| 2-Ethylhexyl methacrylate | 688-84-6 | DNEL | 5 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |

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| Relevant PNECs of components | | | | | | |
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| Name of substance | CAS No | End-point | Threshold level | Organism | Environmental compartment | Exposure time |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 2.4 µg/l | aquatic organisms | freshwater | short-term (single instance) |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 0.24 µg/l | aquatic organisms | marine water | short-term (single instance) |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 24.33 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 12.9 µg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 1.29 µg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | PNEC | 1.17 µg/kg | terrestrial organisms | soil | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 0.003 mg/l | aquatic organisms | freshwater | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 0 mg/l | aquatic organisms | marine water | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 10 mg/l | aquatic organisms | sewage treatment plant (STP) | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 2.24 mg/kg | aquatic organisms | freshwater sediment | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 0.224 mg/kg | aquatic organisms | marine sediment | short-term (single instance) |
| 2-Ethylhexyl methacrylate | 688-84-6 | PNEC | 0.446 mg/kg | terrestrial organisms | soil | short-term (single instance) |

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8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection

Skin protection



Chemical protective clothing.

Hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- type of material

Nitrile rubber

- material thickness

Use gloves with a minimum material thickness: ≥ 0.35 mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|----------------------------------------------------------|----------------------------------------------------------------------------------|
| Physical state | liquid |
| Colour | brown |
| Odour | characteristic |
| Melting point/freezing point | -43 °C calculated value, referring to a component of the mixture |
| Boiling point or initial boiling point and boiling range | >300 °C at 989 mbar calculated value, referring to a component of the mixture |
| Evaporation rate | not determined |
| Flammability | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit | LEL: UEL: not determined |

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| | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------|
| Flash point | 234 °C (ASTM D92 (COC)) |
| Auto-ignition temperature | 490 °C (auto-ignition temperature (liquids and gases)) calculated value, referring to a component of the mixture |
| Decomposition temperature | no data available |
| pH (value) | not determined |
| Kinematic viscosity | 43 mm ² /s at 40 °C |

Solubility

| | |
|------------------|-----------|
| Water solubility | insoluble |
|------------------|-----------|

| | |
|---------------------------------------------------|-----------------------------------|
| Partition coefficient n-octanol/water (log value) | this information is not available |
|---------------------------------------------------|-----------------------------------|

| | |
|-----------------|----------------------------------------------------------------------------|
| Vapour pressure | 0 Pa at 25 °C calculated value, referring to a component of the mixture |
|-----------------|----------------------------------------------------------------------------|

Density and/or relative density

| | |
|-------------------------|-----------------------------------------------|
| Density | 860 kg/m ³ at 15 °C |
| Relative vapour density | information on this property is not available |

| | |
|--------------------------|-----------------------|
| Particle characteristics | not relevant (liquid) |
|--------------------------|-----------------------|

9.2 Other information

| | |
|----------------------------------------------------|-------------------------------------------------------------|
| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards): not relevant |
| Other safety characteristics | there is no additional information |

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Acids, bases, oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------|-----------|
| Name of substance | CAS No | Exposure route | ATE |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | oral | 500 mg/kg |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched), 2-Ethylhexyl methacrylate. May produce an allergic reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards**Endocrine disrupting properties**Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.**SECTION 12: Ecological information****12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

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| Aquatic toxicity (acute) of components of the mixture | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-----------|-----------------------|---------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | LL50 | 24 mg/l | fish | 96 h |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | EL50 | 91.4 mg/l | aquatic invertebrates | 48 h |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | EC50 | 6.4 mg/l | algae | 96 h |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | ErC50 | 15 mg/l | algae | 96 h |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | NOELR | 3.2 mg/l | fish | 96 h |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | NOEC | 1.7 mg/l | algae | 96 h |
| 2-Ethylhexyl methacrylate | 688-84-6 | LC50 | 2.78 mg/l | fish | 96 h |
| 2-Ethylhexyl methacrylate | 688-84-6 | ErC50 | 7.68 mg/l | algae | 72 h |
| 2-Ethylhexyl methacrylate | 688-84-6 | NOEC | 0.28 mg/l | algae | 72 h |
| 2-Ethylhexyl methacrylate | 688-84-6 | LOEC | 0.54 mg/l | algae | 72 h |

| Aquatic toxicity (chronic) of components of the mixture | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------|-----------------------|---------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | EL50 | 0.91 mg/l | aquatic invertebrates | 21 d |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | EC50 | 2,433 mg/l | microorganisms | 3 h |
| 2-Ethylhexyl methacrylate | 688-84-6 | EC50 | 0.2 mg/l | aquatic invertebrates | 21 d |
| 2-Ethylhexyl methacrylate | 688-84-6 | LC50 | 2.18 mg/l | aquatic invertebrates | 21 d |
| 2-Ethylhexyl methacrylate | 688-84-6 | NOEC | 0.105 mg/l | aquatic invertebrates | 21 d |
| 2-Ethylhexyl methacrylate | 688-84-6 | LOEC | 0.219 mg/l | aquatic invertebrates | 21 d |

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12.2 Persistence and degradability

Not readily biodegradable.

| Degradability of components | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------|------------------|------|--------|
| Name of substance | CAS No | Process | Degradation rate | Time | Method |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | carbon dioxide generation | 3.6 % | 28 d | |

12.3 Bioaccumulative potential

| Bioaccumulative potential of components | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|----------------------------|----------|
| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | | 436 | <0.3 (pH value: 7, 40 °C) | |
| 2-Ethylhexyl methacrylate | 688-84-6 | 37 | 4.95 (pH value: ~6, 20 °C) | |

12.4 Mobility in soil

Insoluble in water. Spillages may penetrate the soil causing ground water contamination. This product floats on water and may affect the oxygen-balance in the water.

12.5 Results of PBT and vPvB assessment

 Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties

 Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

| | |
|----------------------------------------|-----------------------------------------------------------------------|
| 14.1 UN number | not subject to transport regulations |
| 14.2 UN proper shipping name | not relevant |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |

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14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

International Maritime Dangerous Goods Code (IMDG) - additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Seveso Directive

| 2012/18/EU (Seveso III) | | | |
|-------------------------|---------------------------------------|---------------------------------------------------------------------------------------|-------|
| No | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
| | not assigned | | |

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

| List of pollutants (WFD) | | | | |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|---------|
| Name of substance | Name acc. to inventory | CAS No | Listed in | Remarks |
| 2-Ethylhexyl methacrylate | Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment | | a) | |

Legend

a) Indicative list of the main pollutants

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

None of the ingredients are listed.

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Restrictions according to GB REACH, Annex 17

| Dangerous substances with restrictions (GB REACH, Annex 17) | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------|----|
| Name | Name acc. to inventory | Conditions of restriction | No |
| Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | R3 | 3 |
| 2-Ethylhexyl methacrylate | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | R3 | 3 |

Legend

R3

- Shall not be used in:
 - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
 - tricks and jokes,
 - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
- Articles not complying with paragraph 1 shall not be placed on the market.
- Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
 - can be used as fuel in decorative oil lamps for supply to the general public, and,
 - present an aspiration hazard and are labelled with R65 or H304,
- Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the British Standard Specification on Decorative oil lamps (BS EN 14059) adopted by the British Standards Institute.
- Without prejudice to the implementation of other legislation relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
 - lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010 'Just a sip of lamp oil'
 - or even sucking the wick of lamps
 - may lead to life-threatening lung damage';
 - grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life-threatening lung damage';
 - lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
- Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the Agency.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) |
|---------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 2.1 | | Classification (acc. to GB CLP): change in the listing (table) |
| 2.2 | | - supplemental hazard information: change in the listing (table) |
| 2.3 | Other hazards: There is no additional information. | Other hazards |
| 2.3 | Results of PBT and vPvB assessment: Does not contain any substances that are assessed to be a PBT or a vPvB $\geq 0.1\%$. | Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$. |
| 2.3 | Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$. | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$. |
| 3.2 | Mixtures: The product does not contain (other) ingredients which are classified according to present knowledge of the sup- | Mixtures: The product does not contain (other) ingredients which are classified according to present knowledge of the sup- |

Safety Data Sheet

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

Transition document following GB exit from the EU

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| Section | Former entry (text/value) | Actual entry (text/value) |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | plier and contribute to the classification of the product and hence require reporting in this section. | plier and contribute to the classification of the product and hence require reporting in this section. REACH information: In order to use the most updated information we have incorporated data available via the public REACH dossier into the safety datasheet. Ingredients in the mixture do not fulfill the tonnage requirements for REACH registration as they are produced and/or imported <1 tonne per year. |
| 3.2 | | Mixtures: change in the listing (table) |
| 7.2 | | Maximum storage period: 60 ms |
| 7.3 | Specific end use(s): There is no additional information. | Specific end use(s): See section 1.2. |
| 8.1 | | Relevant PNECs of components: change in the listing (table) |
| 8.2 | Appropriate engineering controls: General ventilation. | Appropriate engineering controls: General ventilation. Provide eyewash stations and safety showers at the workplace. |
| 8.2 | Eye/face protection: eye protection must be worn Use safety goggle with side protection | Eye/face protection: eye protection must be worn Use safety goggle with side protection |
| 8.2 | Skin protection: wear protective clothing Chemical protective clothing. | Skin protection: wear protective clothing Chemical protective clothing. |
| 8.2 | Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. | Hand protection: safety gloves must be worn Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. |
| 8.2 | - other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Provide eyewash stations and safety showers at the workplace. | - other protection measures: Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. |
| 9.1 | Melting point/freezing point: not determined | Melting point/freezing point: -43 °C calculated value, referring to a component of the mixture |
| 9.1 | Boiling point or initial boiling point and boiling range: not determined | Boiling point or initial boiling point and boiling range: >300 °C at 989 mbar calculated value, referring to a component of the mixture |
| 9.1 | Auto-ignition temperature: not determined | Auto-ignition temperature: 490 °C (auto-ignition temperature (liquids and gases)) calculated value, referring to a component of the mixture |
| 9.1 | Vapour pressure: not determined | Vapour pressure: 0 Pa at 25 °C calculated value, referring to a component of the mixture |
| 9.1 | | Density and/or relative density |

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| Section | Former entry (text/value) | Actual entry (text/value) |
|---------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 9.1 | | Relative vapour density: information on this property is not available |
| 9.2 | Other information: There is no additional information. | Other information |
| 11.1 | Acute toxicity of components of the mixture | |
| 11.2 | Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$. | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$. |
| 12.2 | | Degradability of components: change in the listing (table) |
| 12.3 | | Bioaccumulative potential of components: change in the listing (table) |
| 12.5 | Results of PBT and vPvB assessment: Does not contain any substances that are assessed to be a PBT or a vPvB $\geq 0.1\%$. | Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$. |
| 12.6 | Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$. | Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$. |
| 15.1 | | Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table) |
| 16 | Indication of changes (revised safety data sheet): Complete revision of the safety data sheet. | |
| 16 | | Abbreviations and acronyms: change in the listing (table) |
| 16 | | List of relevant phrases (code and full text as stated in section 2 and 3): change in the listing (table) |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute Tox. | Acute toxicity |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic hazard |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| COD | Chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No-Effect Level |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |

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| Abbr. | Descriptions of used abbreviations |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ED | Endocrine disruptor |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| EL50 | Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms |
| ELINCS | European List of Notified Chemical Substances |
| ErC50 | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| Eye Dam. | Seriously damaging to the eye |
| Eye Irrit. | Irritant to the eye |
| GB CLP | The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended) |
| GB REACH | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended) |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods Code |
| index No | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval |
| LEL | Lower explosion limit (LEL) |
| LL50 | Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality |
| LOEC | Lowest Observed Effect Concentration |
| log KOW | n-Octanol/water |
| NLP | No-Longer Polymer |
| NOEC | No Observed Effect Concentration |
| NOELR | No Observed Effect Loading Rate |
| PBT | Persistent, Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| Skin Corr. | Corrosive to skin |
| Skin Irrit. | Irritant to skin |
| Skin Sens. | Skin sensitisation |
| STOT SE | Specific target organ toxicity - single exposure |
| UEL | Upper explosion limit (UEL) |
| vPvB | Very Persistent and very Bioaccumulative |

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Key literature references and sources for data

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended). The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended). GB mandatory classification and labelling.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|------|----------------------------------------------------|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.