

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 30/06/2015 Revision date: 25/02/2021 Supersedes version of: 05/10/2018 Version: 1.3

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

1.1. Product identifier

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

1.2.1. Relevant identified uses

Main use category Industrial/Professional use spec Function or use category : Industrial use, Professional use, Consumer use

- : Used in closed systems : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV Maxwellstraat 41 3316 GP Dordrecht Nederland T 0031 78 651 2322 - F 0031 78 617 4848 mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number

: +31 (0) 6 54924171 During office hours: 8.30 t/m 17:00 h

| Country | Official advisory body | Address | Emergency number | Comment |
|----------------|--|---------------------------------|------------------|-----------------------------------|
| | Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust | Avonley Road SE14 5ER London | 0870 243 2241 | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals |
| United Kingdom | National Poisons Information Service (Belfast Centre) Royal Victoria Hospital | Grosvenor Road BT12 6BA | 0344 892 0111 | Only for healthcare professionals |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

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

EUH-statements

 EUH208 - Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate(93882-40-7). May produce an allergic reaction.
 EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|------------|---|
| Baseoil - unspecified | CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25 | 15 – 40 | Asp. Tox. 1, H304 |
| Bis(nonylphenyl)amine | CAS-No.: 36878-20-3 EC-No.: 253-249-4 REACH-no: 01-2119488911- 28 | 1 – 2.4 | Aquatic Chronic 4, H413 |
| Lubricating oil (petroleum), C20-50,-obtained from hydrotreated neutral oil. | CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889- 13 | 1 – 2.4 | Asp. Tox. 1, H304 |
| 1,3,4-Thiadiazolidine-2,5-dithione, reaction products with hydrogen peroxide and tert-nonanethiol | EC-No.: 293-927-7 REACH-no: 01-2119976351- 35 | 1 – 2.4 | Aquatic Chronic 3, H412 |
| 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate | CAS-No.: 93882-40-7 EC-No.: 299-434-3 REACH-no: 01-2120735527- 50 | 0.1 – 0.49 | Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| Phosphorodithioic acid, mixed 0,0-bis (1,3- dimethylbutyl and iso-Pr)esters, zi | CAS-No.: 68457-79-4 EC-No.: 270-608-0 REACH-no: 01-2119493628- 22-XXXX | 0.1 – 0.24 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 |
| Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-iso alkyl oxy) dervis, C10-rich | CAS-No.: 398141-87-2 EC-No.: 800-172-4 REACH-no: 01-2119969520- 35 | 0.1 – 0.24 | Aquatic Chronic 2, H411 |

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 4: First aid measures

| 4.1. Description of first aid measures | |
|--|---|
| First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion | No special measures required. Wash skin thoroughly with mild soap and water. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Do NOT induce vomiting. Rinse mouth. Obtain emergency medical attention. |
| 4.2. Most important symptoms and effects | , both acute and delayed |
| Symptoms/effects after inhalation | Not expected to present a significant inhalation hazard under anticipated conditions of normal use. |
| Symptoms/effects after skin contact | : Not expected to present a significant skin hazard under anticipated conditions of normal use. |
| Symptoms/effects after eye contact | : Not expected to present a significant eye contact hazard under anticipated conditions of normal use. |
| Symptoms/effects after ingestion | : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

Firefighting instructions

Protection during firefighting

| SECTION 5: Firefighting measures | ; | |
|--|--|--|
| 5.1. Extinguishing media | | |
| Suitable extinguishing media Unsuitable extinguishing media | Water haze. Foam. Powder. Dry chemical.Do not use a heavy water stream. | |
| 5.2. Special hazards arising from the | substance or mixture | |
| No additional information available | | |
| 5.3. Advice for firefighters | | |
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. | |

: Use water spray or fog for cooling exposed containers.

: Do not enter fire area without proper protective equipment, including respiratory protection.

| SECTION 6: Accidental release | measures | |
|---|---|--|
| 6.1. Personal pressutions, protecti | ve equipment and emergency procedures | |
| 6.1. Personal precautions, protecti | ve equipment and emergency procedures | |
| 6.1.1. For non-emergency personnel | | |
| Protective equipment | : Wear suitable protective clothing and gloves. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Wear suitable protective clothing and gloves. | |
| 6.2. Environmental precautions | | |
| Prevent entry to sewers and public waters | Notify authorities if product enters sewers or public waters. | |
| 6.3. Methods and material for conta | inment and cleaning up | |

| For containment | : Impound and recover large spill by mixing it with inert granular solids. |
|-------------------------|---|
| Methods for cleaning up | : Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr. |
| Other information | : May be dangerously slippery if spilled. Use suitable disposal containers. |
| | |

6.4. Reference to other sections

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| SECTION 7: Handling and stor | age |
|--------------------------------------|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required. |
| Handling temperature | : < 40 °C |
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| 7.2. Conditions for safe storage, in | ncluding any incompatibilities |
| Storage conditions | : Store in dry, cool, well-ventilated area. |

: < 40 °C

7.3. Specific end use(s)

Storage temperature

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective goggles. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Hand protection | | | | | |
|-----------------|----------------------|-------------------|----------------|-------------|----------|
| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Safety gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | >0.35 | | |

8.2.2.3. Respiratory protection

Respiratory protection:

No special protection required where adequate ventilation is maintained.

SECTION 9: Physical and chemical properties

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

| Physical state | : Liquid |
|---|---|
| Colour | red. |
| Appearance | : Oily liquid. |
| Odour | : Characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : Not available |
| Flammability | : Not available |
| _ower explosion limit | : Not available |
| Jpper explosion limit | : Not available |
| Flash point | : > 160 °C (ASTM D92) |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| DH | : Not available |
| ∕iscosity, kinematic | : 38 mm²/s (40°C) |
| Solubility | : Slightly soluble, the product remains on the water surface. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| √apour pressure | : Not available |
| √apour pressure at 50°C | : Not available |
| Density | : 862 kg/m³ (15°C) |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

| SECTION 10: Stability and reactivity | |
|--------------------------------------|--|
| 10.1. Reactivity | |
| None under normal conditions. | |

10.2. Chemical stability

Stable under normal conditions.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| 10.3. Possibility of hazardous reactions |
|--|
| None under normal conditions. |
| 10.4. Conditions to avoid |
| No additional information available |
| 10.5. Incompatible materials |
| Strong oxidizers. Acids. Bases. |
| 10.6. Hazardous decomposition products |

No additional information available

| SECTION 11: Toxicological information | | |
|--|---|--|
| 11.1. Information on hazard classes | as defined in Regulation (EC) No 1272/2008 | |
| Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) | Not classified Not classified Not classified | |
| Bis(nonylphenyl)amine (36878-20-3 |) | |
| LD50 oral rat | > 5000 mg/kg OECD 401 | |
| LD50 dermal rat | > 2000 mg/kg OECD 402 | |
| Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Additional information Reproductive toxicity STOT-single exposure STOT-repeated exposure Aspiration hazard | Not classified Not classified Not classified Not classified Not classified <3% DMSO (IP346) Not classified | |
| Automatic Transmission Fluid IID/ | Dexronll-D | |
| Viscosity, kinematic | 38 mm²/s (40°C) | |
| 11.2 Information on other bazards | | |

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| - | | |
|---|---|--|
| Hazardous to the aquatic environment, short-term : (acute) | Not classified | |
| Hazardous to the aquatic environment, long–term : Not classified (chronic) | | |
| Bis(nonylphenyl)amine (36878-20-3) | | |
| LC50 - Fish [1] | > 100 mg/l OECD 203 (Danio rerio) | |
| EC50 - Crustacea [1] | > 100 mg/l (Daphnia magna) | |
| EC50 72h - Algae [1] | 100 mg/l OECD 201 (Desmodesmus subspicitus) | |

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Phosphorodithioic acid, mixed 0,0-bis (1,3-di | methylbutyl and iso-Pr)esters, zi (68457-79-4) |
|--|---|
| LC50 - Fish [1] | 4.5 mg/l OECD 203, (Cyprinodon variegatus) |
| EC50 - Crustacea [1] | 23 mg/l OECD 202 (Daphnia magna) |
| EC50 72h - Algae [1] | 21 mg/l |
| 12.2. Persistence and degradability | |
| Automatic Transmission Fluid IID/ DexronII-I |) |
| Persistence and degradability | Not soluble in water, so only minimally biodegradable. |
| Bis(nonylphenyl)amine (36878-20-3) | |
| Biodegradation | 1 % @ 28d |
| Phosphorodithioic acid, mixed 0,0-bis (1,3-di | methylbutyl and iso-Pr)esters, zi (68457-79-4) |
| Biodegradation | 1.5 % OECD 301B |
| 12.3. Bioaccumulative potential | |
| Bis(nonylphenyl)amine (36878-20-3) | |
| Partition coefficient n-octanol/water (Log Pow) | > 7.6 |
| Phosphorodithioic acid, mixed 0,0-bis (1,3-di | methylbutyl and iso-Pr)esters, zi (68457-79-4) |
| Partition coefficient n-octanol/water (Log Kow) | 0.69 |
| 12.4. Mobility in soil | |
| No additional information available | |
| 12.5. Results of PBT and vPvB assessment | |
| No additional information available | |
| 12.6. Endocrine disrupting properties | |
| No additional information available | |
| 12.7. Other adverse effects | |
| No additional information available | |
| SECTION 13: Disposal considerations | |
| 13.1. Waste treatment methods | |
| Product/Packaging disposal recommendations : | Dispose in a safe manner in accordance with local/national regulations. |
| SECTION 14: Transport information | |
| In accordance with / / ADR / IMDG / IATA / ADN / R | D |
| | |

| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|------------------------------|----------------|----------------|----------------|----------------|
| 14.1. UN number or ID number | | | | |
| Not regulated for transport | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping | g name | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|-----------------------------------|--|-----------------------------------|-----------------------------------|--------------------------------------|
| 14.3. Transport hazard o | class(es) | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental haz | ards | | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport No data available

Rail transport No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | | |
|-----------------------|--|----------|----------|
| Section | Changed item | Change | Comments |
| 2.2 | EUH-statements | Added | |
| 3 | Composition/information on ingredients | Modified | |
| 11.1 | Additional information | Added | |
| 15.2 | Chemical safety assessment | Added | |

| Abbreviations and acronyms: | | |
|-----------------------------|--|--|
| | Abbreviations and acronyms: | |
| | RID: Regulations Concerning the International Transport of Dangerous Goods by Rail | |
| | ICAO: International Civil Aviation Organization | |
| | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road | |
| | IMDG: International Maritime Code for Dangerous Goods | |
| | IATA: International Air Transport Association | |
| | GHS: Globally Harmonized System of Classification and labelling of Chemicals | |
| | EINECS: European Inventory of Existing Commercial Chemical Substances | |
| | ELINCS: European List of Notified Chemical Substances | |
| | CAS: Chemical Abstracts Service (division of the American Chemical Society) | |
| | VOC: Volatile Organic Compounds (USA, EU) | |
| | LC50: Lethal concentration, 50 percent | |
| | LD50: Lethal dose, 50 percent | |

| Full text of H- and EUH-statements: | | |
|-------------------------------------|--|--|
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 | |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 | |
| Aquatic Chronic 4 | Hazardous to the aquatic environment – Chronic Hazard, Category 4 | |
| Asp. Tox. 1 | Aspiration hazard, Category 1 | |
| EUH208 | Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate(93882-40-7). May produce an allergic reaction. | |
| EUH210 | Safety data sheet available on request. | |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 | |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | |
| H304 | May be fatal if swallowed and enters airways. | |
| H315 | Causes skin irritation. | |
| H317 | May cause an allergic skin reaction. | |
| H318 | Causes serious eye damage. | |

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| H319 | Causes serious eye irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.