# Prista DOT 4

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Revision date: 1/1/2023 Supersedes version of: 4/1/2022

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | Prista DOT 4 |
| Product code | : | TA001 |
| Type of product | : | brake fluids |
| Synonyms | : | Brake Fluid |
| Product group | : | Blend |

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

#### 1.2.1. Relevant identified uses

Intended for general public

| | | |
|---|---|---|
| Main use category | : | Consumer use,Professional use |
| Industrial/Professional use spec | : | Distribution<br>Formulation & (re)packing of substances and mixtures<br>Used in closed systems<br>Use in functional fluids |
| Use of the substance/mixture | : | brake fluids |

#### 1.2.2. Uses advised against

| | | |
|---|---|---|
| Restrictions on use | : | Comply with instructions for use (refer to technical sheet) |

### 1.3. Details of the supplier of the safety data sheet

**Supplier**
Prista Oil Holding EAD
46 Treti Mart Blvd.
7002 Ruse – Bulgaria
Bulgaria
T + 359 82 82 69 40
information@prista-oil.bg - http://www.prista-oil.com/en

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | Unified emergency number: 112 |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

| | |
|---|---|
| Reproductive toxicity, Category 2 | H361 |

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

**Adverse physicochemical, human health and environmental effects**

Suspected of damaging the unborn child. May cause an allergic skin reaction.

### 2.2. Label elements

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

Hazard pictograms (CLP) :

GHS08

| | | |
|---|---|---|
| Signal word (CLP) | : | Warning |
| Contains | : | Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate |

| | | |
|---|---|---|
| Hazard statements (CLP) | : | H361 - Suspected of damaging the unborn child.. |
| Precautionary statements (CLP) | : | P102 - Keep out of reach of children.<br>P201 - Obtain special instructions before use.<br>P280 - Wear protective gloves, protective clothing, eye protection, face protection.<br>P308+P313 - IF exposed or concerned: Get medical advice/attention.<br>P405 - Store locked up.<br>P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |
| EUH-statements | : | EUH208 - Contains Dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction. |
| Child-resistant fastening | : | Not applicable |
| Tactile warning | : | Applicable |

## 2.3. Other hazards

PBT: not relevant – no registration required
vPvB: not relevant – no registration required
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| 2,2'-oxybisethanol (111-46-6) | PBT: not relevant – no registration required<br>vPvB: not relevant – no registration required |
| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | PBT: not relevant – no registration required<br>vPvB: not relevant – no registration required |

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

Comments : CLP Calculation method

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate | CAS-No.: 30989-05-0<br>EC-No.: 250-418-4<br>REACH-no: 01-2119462824-33 | < 35 | Repr. 2, H361d |
| 2,2'-oxybisethanol | CAS-No.: 111-46-6<br>EC-No.: 203-872-2<br>REACH-no: 01-2119457857-21 | < 15 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) |
| 2- [2- (2-butoxyethoxy) ethoxy] ethanol | CAS-No.: 143-22-6<br>EC-No.: 205-592-6<br>REACH-no: 01-2119475107-38 | < 15 | Eye Dam. 1, H318 |
| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether | CAS-No.: 111-77-3<br>EC-No.: 203-906-6<br>EC Index-No.: 603-107-00-6<br>REACH-no: 01-2119475100-52 | < 5 | Repr. 2, H361d |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Dihydro-3-(tetrapropenyl)furan-2,5-dione | CAS-No.: 26544-38-7<br>EC-No.: 247-781-6<br>REACH-no: 01-2119979080-37 | < 0.1 | Eye Irrit. 2, H319<br>Skin Sens. 1A, H317<br>Aquatic Chronic 4, H413 |

Comments : Full text of H-statements: see section 16
Specific concentration limits
Ethanol, 2-butoxy-, manufacture of, by-products from (20=<C<30)Eye Irrit.2, H319; (30=<C<100) Eye Dam. 1, H318

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Get immediate medical advice/attention.

First-aid measures after skin contact : Wash skin with plenty of water. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Get immediate medical advice/attention. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Symptoms of ingestion include drowsiness, weakness, headache, dizziness, nausea, vomiting. For further assistance, contact a local hospital or Department of Health.

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

Symptoms/effects : May be fatal if swallowed and enters airways.

Symptoms/effects after inhalation : May cause drowsiness or dizziness. May cause headache, nausea and irritation of respiratory tract.

Symptoms/effects after skin contact : Causes mild skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Direct contact with the eyes is likely to be irritating. redness, itching, tears. stinging.

Symptoms/effects after ingestion : May cause drowsiness and loss of coordination. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Prompt treatment is essential to minimize damage.

### 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 : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Precautionary measures fire : Evacuate area. Eliminate all ignition sources if safe to do so.

Firefighting instructions : Do not fight fire when fire reaches explosives. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : On exposure to high temperature, may decompose, releasing toxic gases.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it. Eliminate every possible source of ignition. Do not handle until all safety precautions have been read and understood. Notify authorities if product enters sewers or public waters. Avoid contact with skin and eyes.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Do not breathe vapours, mist. Avoid contact with skin and eyes. No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area. Stop release. Cover spill with non combustible material, e.g.: sand/earth. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing vapours, mist. Obtain special instructions before use. Avoid contact with skin and eyes. Do not handle until all safety precautions have been read and understood.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Remove contaminated clothes. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Incompatible products : Oxidizing agent.
Incompatible materials : Sources of ignition.

### 7.3. Specific end use(s)

Product information.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3) | |
|---|---|
| **EU - Indicative Occupational Exposure Limit (IOEL)** | |
| IOEL TWA | 50.1 mg/m³ |
| IOEL TWA [ppm] | 10 ppm |
| Remark | Possibilty of significant uptake through the skin |

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| **EU - Indicative Occupational Exposure Limit (IOEL)** | |
| IOEL TWA | 101 mg/m³ |
| IOEL TWA [ppm] | 23 ppm |

#### 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

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 106 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 60 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects, inhalation | 12 mg/m³ |
| Long-term - systemic effects, dermal | 53 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 10 mg/l |
| PNEC aqua (marine water) | 1 mg/l |
| PNEC aqua (intermittent, freshwater) | 199.5 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 20.9 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 1.53 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 10 mg/l |

| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 8.3 mg/kg bw/day |
| Long-term - systemic effects, inhalation | 29.1 mg/m³ |

| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0) | |
|---|---|
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 4.1 mg/kg bw/day |
| Long-term - systemic effects, inhalation | 7.2 mg/m³ |
| Long-term - systemic effects, dermal | 4.1 mg/kg bw/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.211 mg/l |
| PNEC aqua (marine water) | 0.021 mg/l |
| PNEC aqua (intermittent, freshwater) | 2.112 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.76 mg/kg dwt |
| PNEC sediment (marine water) | 0.076 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.028 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 100 mg/l |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 50 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 195 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 2.5 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 25 mg/m³ |
| Long-term - systemic effects, dermal | 117 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 1.5 mg/l |
| PNEC aqua (marine water) | 0.15 mg/l |
| PNEC aqua (intermittent, freshwater) | 200 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 5.77 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.13 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 0.45 mg/l |

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

**Personal protective equipment:**
Gloves. Protective clothing. Protective goggles.

**Personal protective equipment symbol(s):**

#### 8.2.2.1. Eye and face protection

**Eye protection:**
Safety glasses. EN 166. EN 168

#### 8.2.2.2. Skin protection

**Skin and body protection:**
Wear suitable protective clothing

**Hand protection:**
Protective gloves. Nitrile rubber gloves. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). EN 420. Breakthrough time : 8h

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment. EN 405

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | Yellow. |
| Odour | : | slight. characteristic. |
| Odour threshold | : | Not available |
| Melting point | : | < Not applicable |
| Freezing point | : | -45 °C |
| Boiling point | : | > 230 °C |
| Flammability | : | Not applicable |
| Explosive properties | : | Not applicable. |
| Oxidising properties | : | Not applicable. |
| Explosive limits | : | Not available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | > 140 °C |
| Auto-ignition temperature | : | > 300 °C |
| Decomposition temperature | : | Not available |
| pH | : | 7 – 10.5 |
| Viscosity, kinematic | : | 2.2 mm²/s @100°C |
| Solubility | : | Water miscible. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | < 5 hPa(a) @20°C |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 1.02 – 1.07 g/ml @20°C |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | > 1 |

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

Other properties : Material is hygroscopic

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| **2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)** | |
|---|---|
| LD50 oral rat | 8188 mg/kg (OECD 401 method) |
| LD50 dermal rabbit | 9404 mg/kg (OECD 402 method) |

| **Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7)** | |
|---|---|
| LD50 oral rat | 2900 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LD50 dermal rabbit | 6200 – 7500 mg/kg |
| LC50 Inhalation - Rat | 5.3 g/m³ |

| **2,2'-oxybisethanol (111-46-6)** | |
|---|---|
| LD50 oral rat | 19600 mg/kg (OECD 401 method) |

| **Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0)** | |
|---|---|
| LD50 oral rat | > 2000 mg/kg bodyweight (OECD 401 method) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402 method) |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| LD50 oral rat | 5170 mg/kg (OECD 401 method) |
| LD50 dermal rat | 3540 mg/kg (OECD 401 method) |

Skin corrosion/irritation : Not classified
pH: 7 – 10.5

Serious eye damage/irritation : Not classified
pH: 7 – 10.5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| NOAEL (chronic, oral, animal/male, 2 years) | 2200 mg/kg bodyweight |

Reproductive toxicity : Suspected of damaging the unborn child.. (Based on available data, the classification criteria are not met)

| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3) | |
|---|---|
| NOAEL (animal/male, F0/P) | 200 mg/kg bodyweight Acute effects oral route |
| NOAEL (animal/female, F0/P) | 50 mg/kg bodyweight Acute - local effects, dermal |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| NOAEL (animal/male, F0/P) | 1250 mg/kg bodyweight |
| NOAEL (animal/male, F1) | 625 mg/kg bodyweight |

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified

Additional information : There are potential chronic health effects to consider
Enlargement/affection of the liver
Thyroid enlargement/affection

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| NOAEL (oral, rat, 90 days) | 100 mg/kg bodyweight/day |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| NOAEL (oral, rat, 90 days) | 250 mg/kg bodyweight/day (calculated value) |
| NOAEL (dermal, rat/rabbit, 90 days) | > 1000 mg/kg bodyweight/day |

Aspiration hazard : Not classified

| Prista DOT 4 | |
|---|---|
| Viscosity, kinematic | 2.2 mm²/s @100°C |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3) | |
|---|---|
| LC50 - Fish [1] | 7500 mg/l |
| EC50 - Crustacea [1] | > 500 mg/l |

| Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 100 mg/l |
| EC50 - Other aquatic organisms [1] | 800 ml/l |

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| LC50 - Fish [1] | 75200 mg/l (OECD 203 method) |
| EC50 - Crustacea [1] | 10000 mg/l (OECD 202 method) |
| NOEC (chronic) | > 100 mg/l (calculated value) |

| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0) | |
|---|---|
| LC50 - Fish [1] | > 222.2 mg/l Oncorhynchus mykiss (Rainbow trout) |
| LC50 - Other aquatic organisms [1] | > 224.4 mg/l Pseudokirchneriella subcapitata |
| EC50 - Crustacea [1] | > 211.2 mg/l daphnia |
| EC50 72h - Algae [1] | 224.4 mg/l |
| ErC50 algae | > 224.4 mg/l |
| NOEC chronic algae | 224.4 mg/l |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| LC50 - Fish [1] | 2200 mg/l (OECD 203 method) |
| EC50 - Crustacea [1] | 2210 mg/l (OECD 202 method) |
| EC50 72h - Algae [1] | 336.8 mg/l (OECD 201 method) |
| NOEC chronic algae | 62.5 mg/l |

### 12.2. Persistence and degradability

| Prista DOT 4 | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | > 70 % 28 days |

| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | > 75 % Readily biodegradable |

| Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| Persistence and degradability | Not readily biodegradable. |
| Biodegradation | 9.9 % (OECD 301D method) |

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | > 90 % (OECD 301A method) |

| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| Persistence and degradability | Readily biodegradable. |
| BOD (% of ThOD) | > 85 % ThOD |

### 12.3. Bioaccumulative potential

| 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3) | |
|---|---|
| Partition coefficient n-octanol/water (Log Kow) | -0.682 Bioaccumulation unlikely |

| Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| Partition coefficient n-octanol/water (Log Kow) | ≥ 4.39 Low bioaccumulation potential |

| 2,2'-oxybisethanol (111-46-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -1.98 @25°C |
| Partition coefficient n-octanol/water (Log Kow) | 1 |
| Bioaccumulative potential | not bioaccumulable. |

| Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate (30989-05-0) | |
|---|---|
| Bioaccumulative potential | not bioaccumulable. |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 0.51 @25°C |
| Bioaccumulative potential | not bioaccumulable. |

### 12.4. Mobility in soil

| Dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.92 |

| 2- [2- (2-butoxyethoxy) ethoxy] ethanol (143-22-6) | |
|---|---|
| Surface tension | 61.2 mN/m |

### 12.5. Results of PBT and vPvB assessment

| Prista DOT 4 |
|---|
| PBT: not relevant – no registration required |
| vPvB: not relevant – no registration required |

### 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

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 16 01 13* - brake fluids

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.2. UN proper shipping name** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.3. Transport hazard class(es)** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.4. Packing group** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| **14.5. Environmental hazards** | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information available | | | | |

### 14.6. Special precautions for user

**Overland transport**

Not regulated

**Transport by sea**

Not regulated

**Air transport**

Not regulated

**Inland waterway transport**

Not regulated

**Rail transport**

Not regulated

### 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

**EU restriction list (REACH Annex XVII)**

| Reference code | Applicable on | Entry title or description |
|---|---|---|
| 3(b) | Prista DOT 4 ; 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether ; Dihydro-3-(tetrapropenyl)furan-2,5-dione ; 2,2'-oxybisethanol ; Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate ; 2- [2- (2-butoxyethoxy) ethoxy] ethanol | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |
| 3(c) | Dihydro-3-(tetrapropenyl)furan-2,5-dione | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1 |
| 54. | 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether | 2-(2-methoxyethoxy)ethanol (DEGME) |

Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
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:**
Regulatory information.

| Abbreviations and acronyms: | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |

| Abbreviations and acronyms: | |
|---|---|
| EC50 | Median effective concentration |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| STP | Sewage treatment plant |
| vPvB | Very Persistent and Very Bioaccumulative |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information : None.

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 4 | Hazardous to the aquatic environment – Chronic Hazard, Category 4 |
| EUH208 | Contains Dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H302 | Harmful if swallowed. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H361d | Suspected of damaging the unborn child. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| Repr. 2 | Reproductive toxicity, Category 2 |
| Skin Sens. 1A | Skin sensitisation, category 1A |

PRISTA SDS design EU 2022

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.