Prista ANTIFREEZE-concentrate

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 1/15/2018 Supersedes: 8/8/2017

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Prista ANTIFREEZE-concentrate
Product code	:	TA003/01B-S
Type of product	:	Antifreeze
Synonyms	:	Antifreeze
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 Formulation & (re)packing of substances and mixtures
Use of the substance/mixture	:	Functional Fluids Anti-freezing agent

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

Prista Oil Holding EAD
46 Treti Mart Blvd.
7002 Ruse - 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]

Acute toxicity (oral), Category 4	H302
Specific target organ toxicity — Repeated exposure, Category 2	H373

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07 GHS08

Signal word (CLP)	:	Warning
Hazardous ingredients	:	ethanediol, ethylene glycol
Hazard statements (CLP)	:	H302 - Harmful if swallowed. H373 - May cause damage to organs (kidneys, liver, central nervous system) through prolonged or repeated exposure.
Precautionary statements (CLP)	:	P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read label before use.

P260 - Do not breathe vapours.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves.
P301+P312 - IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P330 - Rinse mouth.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

EUH-statements : EUH210 - Safety data sheet available on request.

Security closing plug for children : Not applicable

Tactile warning : Applicable

2.3. Other hazards

PBT: not relevant – no registration required

vPvB: not relevant – no registration required

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]
ethanediol, ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (REACH-no) 01-2119456816-28	< 98	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium 2-ethylhexanoate	(CAS-No.) 19766-89-3 (EC-No.) 243-283-8	0.9 - 2.4	Repr. 2, H361d
Methyl-1H-benzotriazole	(CAS-No.) 29385-43-1 (EC-No.) 249-596-6 (REACH-no) 01-2119979081-35	0.06 - 0.15	Acute Tox. 4 (Oral), H302 Aquatic Chronic 2, H411

Comments : Not available REACH number or substance is not currently required for registration under REACH

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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. If skin irritation 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 : Drink plenty of water. Get immediate medical advice/attention. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Toxic if swallowed. Symptoms of ingestion include drowsiness, weakness, headache, dizziness, nausea, vomiting. Difficulty in breathing. Blurred vision. Respiratory collapse. Antidote : Intravenous ethanol in sodium bicarbonate solution. 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 : May cause slight irritation. redness, itching, tears.

Symptoms/effects after ingestion : Toxic if swallowed. May cause drowsiness and loss of coordination. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Thirst. Convulsions. 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.

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.

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

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe vapours, mist. Avoid contact with skin and eyes.

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.

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. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

ethanediol, ethylene glycol (107-21-1)		
EU	Local name	Ethylene glycol
EU	IOELV TWA (mg/m³)	52 mg/m³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m³)	104 mg/m³
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Skin

ethanediol, ethylene glycol (107-21-1)	
DNEL/DMEL (Workers)	
Long-term - local effects, dermal	106 mg/cm²
Long-term - local effects, inhalation	35 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, dermal	53 mg/kg bodyweight/day
Long-term - local effects, inhalation	7 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	10 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	199.5 mg/l

Methyl-1H-benzotriazole (29385-43-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.8 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4.4 mg/m³
Long-term - systemic effects, dermal	0.25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.008 mg/l
PNEC aqua (marine water)	0.008 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.0025 mg/kg dwt
PNEC sediment (marine water)	0.0025 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0024 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	39.4 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Protective clothing. Protective goggles.

Hand protection:

Protective gloves. protective gloves: neoprene gloves, PVA. Chemical resistant PVC gloves (to European standard EN 374 or equivalent). EN 420

Eye protection:

Safety glasses. EN 166. EN 168

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. EN 405

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	:	Blue.
Odour	:	slight.
Odour threshold	:	No data available
pH	:	No data available
pH solution	:	8.4 @ 50%
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	-13 °C
Boiling point	:	> 163 °C
Flash point	:	> 115 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	< 0.06 mm Hg @20°C
Relative vapour density at 20 °C	:	> 2
Relative density	:	No data available
Density	:	1.12 g/ml
Solubility	:	Soluble in water.
Log Pow	:	No data available
Log Kow	:	-1.36 not bioaccumulable
Viscosity, kinematic	:	20 cSt @40°C
Viscosity, dynamic	:	No data available
Explosive properties	:	Not applicable.
Oxidising properties	:	Not applicable.
Explosive limits	:	No data available

9.2. Other information

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 toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ATE CLP (oral)	512.033 mg/kg bodyweight

ethanediol, ethylene glycol (107-21-1)	
LD50 oral rat	7712 mg/kg (OECD 401 method)

ethanediol, ethylene glycol (107-21-1)	
LD50 oral	1.4 ml/kg Animals
LD50 dermal rat	> 3500 mg/kg (OECD 402 method)
LD50 dermal rabbit	10600 mg/kg (OECD 402 method)
LC50 inhalation rat (mg/l)	> 2.5 mg/l/4h (OECD 403 method)
LC, Effects on humans, acute, oral, central nervous system	100 ml

Methyl-1H-benzotriazole (29385-43-1)	
LD50 oral rat	720 mg/kg (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

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)

Reproductive toxicity : When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. (Conclusive but not sufficient for classification)

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

STOT-repeated exposure : Ethylene Glycol. May cause kidney and liver disease, and disorders of the central nervous system

Additional information : 2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet.

ethanediol, ethylene glycol (107-21-1)	
LOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day (OECD 407 method)

Sodium 2-ethylhexanoate (19766-89-3)	
LOAEL (oral, rat, 90 days)	446 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	100 - 600 mg/kg bodyweight/day (OECD 414 method)

Aspiration hazard : Not classified

Prista ANTIFREEZE-concentrate	
Viscosity, kinematic	20 mm²/s @40°C

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.

ethanediol, ethylene glycol (107-21-1)	
LC50 fish 1	>= 40761 mg/l (OECD 203 method)
LC50 fish 2	>= 72860 mg/l (OECD 203 method)
EC50 Daphnia 1	> 100 mg/l (OECD 202 method)
EC50 72h algae (1)	9500 - 13000 mg/l (OECD 201 method)
NOEC chronic fish	15380 mg/l

Methyl-1H-benzotriazole (29385-43-1)	
LC50 fish 1	180 mg/l (OECD 201 method)
LC50 fish 2	55 mg/l (OECD 201 method)
EC50 Daphnia 1	100 mg/l (OECD 202 method)
EC50 Daphnia 2	55 mg/l (OECD 202 method)
EC50 72h algae (1)	53 mg/l (OECD 203 method)

12.2. Persistence and degradability

Prista ANTIFREEZE-concentrate	
Persistence and degradability	Readily biodegradable.

ethanediol, ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	> 94 % (OECD 301B method)

Methyl-1H-benzotriazole (29385-43-1)	
Persistence and degradability	Readily biodegradable.

Methyl-1H-benzotriazole (29385-43-1)	
Biodegradation	> 85 % (OECD 302B method)

12.3. Bioaccumulative potential

Prista ANTIFREEZE-concentrate	
Log Kow	-1.36 not bioaccumulable

ethanediol, ethylene glycol (107-21-1)	
Log Kow	-1.36 not bioaccumulable
Bioaccumulative potential	not bioaccumulable.

Methyl-1H-benzotriazole (29385-43-1)	
BCF fish 1	0
BCF fish 2	2.4 l/kg

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Prista ANTIFREEZE-concentrate
PBT: not relevant – no registration required
vPvB: not relevant – no registration required

Component	
ethanediol, ethylene glycol (107-21-1)	PBT: not relevant – no registration required vPvB: not relevant – no registration required

12.6. 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 : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

European List of Waste (LoW) code : 16 01 14* - antifreeze fluids containing dangerous substances

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : Not regulated

UN-No. (IMDG) : Not regulated

UN-No. (IATA) : Not regulated

UN-No. (ADN) : Not regulated

UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated

Proper Shipping Name (IMDG) : Not regulated

Proper Shipping Name (IATA) : Not regulated

Proper Shipping Name (ADN) : Not regulated

Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

IATA

Transport hazard class(es) (IATA) : Not regulated

ADN

Transport hazard class(es) (ADN) : Not regulated

RID

Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : 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. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3(b) 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	Prista ANTIFREEZE-concentrate - ethanediol, ethylene glycol - Methyl-1H-benzotriazole
3(c) 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	Methyl-1H-benzotriazole

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV 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:
Exposure controls/personal protection.

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
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 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Repr. 2	Reproductive toxicity, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

SDS EU (REACH Annex II) Prista

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