

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 1 of 7

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

1.1. Product identifier

AVISTA ANTIFREEZE CONCENTRATE P11

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

Use of the substance/mixture

Anti-freezing agent

Uses advised against

No uses known.

1.3. Details of the supplier of the safety data sheet

Company name:	AVISTA OIL Refining & Trading Deutschland GmbH
Street:	Bahnhofstraße 82
Place:	D-31311 Uetze
Telephone:	+49 5177 / 85 - 0
e-mail:	info@avista-oil.de
Internet:	www.avista-oil.de
Responsible Department:	Produktmanagement (msds@avista-oil.de)

1.4. Emergency telephone number:

Poison Center North (GIZ) pharmacological toxicological service centre of the University of Göttingen Robert-Koch-Straße 40 D-37075 Göttingen + 49 (0) 551 19240 (24 h / d)
 This number is serviced during office hours.:
 Mo - Do 9 - 15 h, Fr 9 - 12 h
 +49 5177 / 85 - 372

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

ethanediol, ethylene glycol

Signal word: Warning

Pictograms:



Hazard statements

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 2 of 7

P270	Do not eat, drink or smoke when using this product.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P330	Rinse mouth.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/containers in accordance with the regulations of waste disposal.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
107-21-1	ethanediol, ethylene glycol	60 - 100 %
	203-473-3	
	01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373	
12179-04-3	disodium tetraborate pentahydrate; borax pentahydrate	1 - < 3,0 %
	215-540-4	
	Repr. 1B; H360FD	

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

Further Information

All concentrations are quoted as mass percentages for liquids and volume percentages for gases. Other substances which are not classified as dangerous are contained up to 100 %.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

- IF exposed or concerned: Get medical advice/attention.
- Self-protection of the first aider
- Remove contaminated, saturated clothing immediately.
- Remove casualty to fresh air and keep warm and at rest.

After inhalation

- Provide fresh air.
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a physician immediately.
- If unconscious place in recovery position and seek medical advice.

After contact with skin

- Take off immediately all contaminated clothing and wash it before reuse.
- After contact with skin, wash immediately with plenty of water and soap.
- In case of skin irritation, seek medical treatment.

After contact with eyes

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.
- Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

- Rinse mouth immediately and drink plenty of water.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 3 of 7

Induce vomiting when the affected person is not unconscious.
Medical treatment necessary.

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

Headache
Gastrointestinal complaints

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

After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.
Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO₂).
Extinguishing powder
Water spray jet

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
Carbon dioxide (CO₂). Carbon monoxide.

5.3. Advice for firefighters

Special protective equipment for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Provide adequate ventilation.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin, eyes and clothes.
Wear personal protection equipment.
Provide adequate ventilation.
Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not empty into drains.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Take up mechanically, placing in appropriate containers for disposal.
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 4 of 7

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Keep away from heat.

When using do not eat, drink, smoke, sniff.

Avoid:

Generation/formation of aerosols

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Keep locked up.

Store in a place accessible by authorized persons only.

Provide adequate ventilation as well as local exhaustion at critical locations.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place.

Keep at temperature not exceeding 40 °C (to be specified by the manufacturer).

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Keep away from food, drink and animal feedingstuffs.

Remove contaminated, saturated clothing immediately.

Wash hands before breaks and after work.

Draw up and observe skin protection programme.

Protect skin by using skin protective cream.

Do not breathe gas/fumes/vapour/spray.

When using do not eat, drink or smoke.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 5 of 7

control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The required protective gloves have to be specified by the glove material and the penetration time of the glove material depending on strength and duration of dermal exposition.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Respiratory protection necessary at:
high concentrations

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light blue
Odour:	none

pH-Value:	not determined	Test method
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Changes in the physical state

Melting point:	-12 °C
Initial boiling point and boiling range:	197 °C
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	111 °C DIN 51376
Lower explosion limits:	3,2 vol. %
Upper explosion limits:	53,0 vol. %
Ignition temperature:	410 °C DIN 51794
Vapour pressure:	50 hPa
Density:	1,1 g/cm ³ DIN 51757
Water solubility:	easily soluble
Partition coefficient:	-1,36
Viscosity / dynamic:	not determined

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.
Keep away from heat.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 6 of 7

Keep away from sources of ignition. - No smoking.

10.3. Possibility of hazardous reactions

Formation of explosive mixtures with: Oxidizing agents, strong.

10.4. Conditions to avoid

none

10.5. Incompatible materials

 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 Oxidizing agents, strong./Acid/alkali

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

ATEmix calculated

ATE (oral) 525,8 mg/kg

Acute toxicity

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
107-21-1	ethanediol, ethylene glycol			
	oral	LD50 5840 mg/kg	Rat	
	dermal	LD50 9530 mg/kg	Rabbit	

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
107-21-1	ethanediol, ethylene glycol				
	Acute fish toxicity	LC50 40761 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50 41100 mg/l	48 h	Daphnia magna (Big water flea)	

12.2. Persistence and degradability

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol, ethylene glycol	-1,36

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

AVISTA ANTIFREEZE CONCENTRATE P11

Print date: 17.03.2017

Product code: 170583ART

Page 7 of 7

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of contents/containers in accordance with the regulations of waste disposal.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Do not allow to enter into surface water or drains.

Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste.

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
disodium tetraborate pentahydrate; borax pentahydrate

Restrictions on use (REACH, annex XVII):

Entry 30: disodium tetraborate pentahydrate; borax pentahydrate

2004/42/EC (VOC): 99,99 %

Additional information

To follow: 850/2004/EC, 1107/2009/EC, 649/2012/EC

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D):

1 - slightly water contaminating

15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been carried out.

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

H302	Harmful if swallowed.
H360FD	May damage fertility. May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)