

Material Safety Data Sheet According to Regulation (EC) No. 1907/2006

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

1.1.1 Identification on the label / trade name

Trade Name: AVISTA Fuel LE

1.1.2 REACH registration number

The substance must not be registered according to REACH (article 2.7 d).

1.1.3 Main use of the product

Fuel

1.1.4 Product registration number – Denmark 2252851

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

1.2.1 Identified uses

Recommendation:

Fuel

Consideration of CONCAWE's suggested identified uses.

1.2.2 Uses advised against

Not applicable.

1.3. Details of the supplier of the safety data sheet

AVISTA OIL Danmark A/S
Juelsmindevej 6 – 18
4400 Kalundborg
Dänemark
Telefon +45 59 56 56 44
Fax +45 59 56 56 88

E-Mail (fachkundige Person): msds@avista-oil.de

1.4. Emergency telephone number (only during business hours, Mo - Thu 9 - 15, Fr 9 - 12)

Telephone: +49 (0) 5177 / 85 - 100 (Frau Dr. Ohnesorge)
E-mail: msds@avista-oil.de

2. Hazardous Identification

2.1. Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

Flam. Liq. 2	Flammable liquid category 2
H225	Highly flammable liquid and vapour.
Carc. Cat. 1B	Cancerogenicity category 1B
H350	May cause cancer
Muta. Cat. 1B	Mutagenicity category 1B
H340	May cause genetic defects
Asp. 1	Aspiration hazard category 1
H304	May be fatal if swallowed and enters airways.

2.1.2 67/548/EEC or 1999/45/EC

F	Highly flammable.
R11	Highly flammable.
Carc. Cat. 2	Cancerogenicity category 2
R45	May cause cancer.
Muta. Cat. 2	Mutagenicity category 2
R46	May cause heritable genetic damage.
Xn	Harmful
R65	Harmful: May cause lung damage if swallowed.

2.1.3 Additional hints

Vapours are heavier than air and spread along floors. They can form explosive mixtures with air at low temperatures, too.

2.2. Label elements

Pictogram:



Signal word:

Danger

Hazards Statements:

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H340	May cause genetic defects
H350	May cause cancer

Precautionary Statements:

P201	Obtain special instructions before use.
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P331	Do NOT induce vomiting.

Contains:

Naphtha (petroleum), heavy straight run

2.3. Other hazards

Vapours are heavier than air and spread along floors. They can form explosive mixtures with air at low temperatures, too.

See also sections 11, 12 and 15.

3. Composition / information on Ingredients

3.1. Substances

3.1.1 General description

Complex mixture of volatile hydrocarbons containing paraffin, olefins, naphths and aromatics with hydrocarbon numbers predominantly between C₅ – C₁₃; naphtha – low boling.

3.1.2 Hazard ingredients

<i>Chemical name</i>	<i>EG-No. CAS-No. Index-No. Reg.-No.</i>	<i>Conc. [%]</i>	<i>Classification according Regulation (EC) No 1272/2008</i>	<i>Classification according 67/548/EEC</i>
Naphtha (petroleum), heavy straight run	265-041-0 64741-41-9 649-264-00-4	100	Flam. Liq. 2; H225 Carc. Cat. 1B; H350 Muta. Cat. 1B; H340 Asp. 1; H304	F; R11 Carc. Cat. 2; R45 Muta. Cat. 2; R46 Xn; R65

3.1.3 Additional hints

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

3.2. Mixtures

3.2.1 General description

Not applicable. The product is a substance.

3.2.2 Hazard ingredients

Not applicable. The product is a substance.

3.2.3 Additional hints

Not applicable. The product is a substance.

4. First Aid Measures

4.1. Description of first aid measures

4.1.1 General information

First aider: Pay attention to self-protection!
Inhalation of major quantities: Acroataxia, inebriation, headache, nausea.
Prolonged exposure: Dizziness, unconsciousness and apnoea possible.

4.1.2 In case of inhalation

Remove casualty to fresh air.
If there is difficulty in breathing, give oxygen.
If breathing is irregular or stopped, administer artificial respiration. Seek medical advice immediately.
If there is a risk of loss of consciousness, place and transport affected person in the recovery position.

4.1.3 In case of skin contact

Remove contaminated, saturated clothing immediately.
After skin contact, wash immediately with soap and plenty of water, remove contaminated, saturated clothing.
In case of skin irritation (redness etc.), consult a doctor.

4.1.4 In case of eye contact

In case of eye contact, rinse immediately thoroughly with plenty of water and if necessary consult a doctor.
Carry along safety data sheet.

4.1.5 In case of ingestion

Do NOT induce vomiting. If swallowed or vomited - danger of entering into the lung. In case of vomiting and/or unconsciousness place affected person in the recovery position. Keep respiratory system unobstructed. Consult physician immediately.

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

The following symptoms can occur: Headache, intoxication condition, nausea, behaviourness, swindle, difficulty in breathing, unconsciousness, respiratory arrest. When swallowing with following vomiting aspiration can take place into the lung, this can lead to chemical pneumonia or to the asphyxiation.

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

If necessary oxygen artificial respiration.

5. Fire Fighting Measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media

Carbon dioxide
Foam
Water spray jet
Dry fire-extinguishing media

5.1.2 Extinguishing media which must not be used for safety reasons

Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of ignitable vapour/air mixtures possible.
Beware of reigniting.

Substances potentially set free in case of fire:

Carbon oxides
Nitrogen oxides
Sulphur oxides

5.3. Advice for fire fighters

Wear a self-contained breathing apparatus and chemical protective clothing.
Use water spray jet to cool endangered containers.
Do not inhale explosion and combustion gases.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation.
Keep away from sources of ignition, do not smoke.
Avoid eye and skin contact as well as inhalation.
Only wear appropriate protective clothing.
Keep unprotected people away.
Do not put any rags impregnated with the product into your trouser pockets.
Attention, risk of slipping.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not allow to enter into soil/subsoil. Risk of explosion!
In case of entering the environment inform responsible authorities

6.3. Methods and material for containment and cleaning up

Remove from the water surface (e.g. skimming, sucking).

Absorb with liquid-binding material (e.g. general-purpose binder), treat recovered material as prescribed in section 13.

Do not rinse away with water or other aqueous cleaning agents.

6.4. Reference to other sections

See section 13. As well as personal protective equipment see section 8.

7. Handling and Storage

7.1. Precautions for safe handling

7.1.1 Hints for safe handling

When using ensure sufficient ventilation

During the handling spraying and burying should be avoided.

Prevent aerosol and dust generation

Avoid formation of fog and aerosol avoid.

Do NOT inhale vapours.

When using do not eat, drink or smoke.

Do NOT use for cleaning purposes.

7.1.2 Precautions against fire and explosion

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Provide earthing of containers, equipment, pumps and ventilation facilities.

Use only antistatic equipped (spark-free) tools.

Wear anti-static footwear and clothing.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/.../equipment.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Requirements for storage rooms and vessels

Keep container tightly closed. Keep in well-ventilated place.

Keep away from sources of ignition and heat.

Store in a place accessible by authorized persons only.

7.2.2 Further information on storage conditions

Do not store together with fire promoting or spontaneously combustible substances.

Storage class VCI 3 = Flammable liquids.

7.3. Specific end use(s)

Observe technical data sheet.

8. Exposure controls / Personal protection

8.1. Control parameters

8.1.1 Exposure limit values

Limit value gasoline (conclusion by analogy): 250 mg/m³

(The limit value for gasoline according to DIN EN 228 is a summation limit value of all hydrocarbons including Benzene and all oxygen containing components.)

8.2. Exposure controls

8.2.1. Occupational exposure controls

8.2.1.1 Product related measures to prevent exposure

No data available.

8.2.1.2 Instructual measures to prevent exposure

No data available.

8.2.1.3 Organisational measures to prevent exposure

No data available.

8.2.1.4 Technical measures to prevent exposure

Ensure adequate ventilation of the area.

Emergency shower installed. Provide eye shower and label its location conspicuously

The substance should only be handled in closed apparatus or systems.

See item 7, storage.

8.2.1.5 Personal protection equipment

Respiratory protection:

Occurrence of higher concentrations:

Combination filtering device Filter A (brown - EN 141).

Use self-contained respirator if you have unclear conditions

Hand protection:

Impermeable gloves (EN 374).

Suitable material: NBR (nitrile rubber).

Unsuitable material: Leather, canvas

Breakthrough time (maximal wear duration): > 480 min.

Breakthrough times and swelling properties of the material must be taken into consideration.

Additional information regarding to hand protection:

No test has been carried out. The choices for the preparations have been selected to the best of one's knowledge and the information about the ingredients. The choices for substances have been derived from the specifications of the glove manufacturers. The final selection of the glove material has to take into account the breakthrough times, the permeation rates and the degradation. The selection of a suitable glove is not only depending on the material, but also on quality characteristics and can differ from manufacturer to manufacturer. The durability of glove materials can't be pre-estimated for preparations and therefore has to be verified before use. The exact breakthrough time of the glove material can be received from the manufacturer and has to be observed.

Eye protection:

Eye glasses with side protection (EN 166). At higher risk: Face protection shield.

Protective clothing:

Wear anti-static footwear and clothing.

Health and safety measures:

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

Remove contaminated, saturated clothing immediately.

Do not put any product-impregnated cleaning rags into your trouser pockets.

Thorough skin-cleaning after work. Apply skin care products after work.

8.2.2 Environmental exposure controls

8.2.2.1 Product related measures to prevent exposure

No data available.

8.2.2.2 Instructual measures to prevent exposure

No data available.

8.2.2.3 Organisational measures to prevent exposure

No data available.

8.2.2.4 Technical measures to prevent exposure

See section 6.

8.2.3 Consumer exposure control

8.2.3.1 Measures related to consumer uses of the substance (as such or in preparations)

No data available.

8.2.3.2 Measures related to the service life of the substance in articles

No data available.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

9.1.1 Physical and chemical properties

Physical state:	Liquid
Colour:	Yellow, brown
Odour:	Characteristic

9.1.2 Safety relevant basis data

Boiling point / Boiling range:	~ 100 – 450 °C	
Flashpoint:	< 0 °C	
Ignition Temperature:	No data available.	ASTM E 659
Lower explosion limit:	No data available.	
Upper explosion limit:	No data available.	
Vapour pressure:	No data available.	
Relative Density:	790 - 820 kg/m ³ @ 15 °C	DIN 51757
Water solubility:	No data available.	
Partition coefficient (n-octanol/water):	No data available.	
Viscosity:	0.9 – 2.0 mm ² /s @ 20 °C	DIN 51562

9.2. Other information

No data available.

10. Stability and Reactivity

10.1. Reactivity

See section 9.

10.2. Chemical stability

If product is stored and handled as prescribed it is stable.

10.3. Possibility of hazardous reactions

Avoid open light, fire and other flammable sources.
In case of strong heating up – fire hazard / danger of spontaneous combustion.
Vapours are heavier than air, spread along floors.
Formation of ignitable vapours/gases possible.

10.4. Conditions to avoid

Avoid contact with strong oxidizing agents.
See section 7.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

See section 5.3.

11. Toxicological information

11.1. Information on toxicological effects

11.1.1 Acute toxicity and immediately occurring effects

	Effect dose		Value	Spezies	Remark
Oral	LD50	mg/kg	> 5,000	Rat	Literature
Inhalation	LC50	mg/L (4h)	> 5	Rat	Literature
Dermal	LD50	mg/kg	> 2,000	Rabbit	Literature
Eyes	---	---	No data available.	Rabbit	---

11.1.2 Delayed occurring and chronic effects

Effect	Value	Method	Remark
Sensitizing effects	No data available.	---	---
Carcinogenic effects	Carc. Cat. 2 (67/548/EEC)	---	---
Mutagenic effects	Muta. Cat. 2 (67/548/EEC)	---	---
Reproductive effects	No data available.	---	---
Narcotic effects	No data available.	---	---

11.2 Other information

Gesundheitsschädlich: Kann beim Verschlucken Lungenschäden verursachen.
Weitere Symptome: Magen-Darm-Beschwerden, Durchfall.

12. Ecological information

12.1. Toxicity

Aquatic toxicity	Parameter	Exposure time	Value	Remark
Acute fish toxicity	LC50	96 h	---	---
Acute daphnia toxicity	EC50	48 h	---	---
Acute algae toxicity	IC50	72 h	---	---

12.2. Persistence and degradability

Keine Daten vorhanden.

12.3. Bioaccumulative potential

No data available.

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.

13. Disposal considerations

13.1. Waste treatment methods

13.1.1 Appropriate disposal / product

Saturated contaminated cloth, paper or other organic material pose a fire danger and have to be collected and disposed in a controlled way.

Waste code EC:

13 07 02 – Abfälle aus flüssigen Brennstoffen: Benzin

14 06 03 – Andere Lösemittel und Lösemittelgemische

The named waste codes are recommendations because of the likely use of this product.

Due to specific use and disposal circumstances at the user other waste codes may be suitable.

Recommendation:

Die Entsorgung ist nachweispflichtig.

Entsorgung gemäß dem Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG).

Übergabe an zugelassenes Entsorgungsunternehmen.

13.2 Appropriate disposal / packaging

Beförderung im Tankwagen.

Sorgfältig und möglichst vollständig entleeren.

Vorsicht mit entleerten Gebinden. Bei Entzündung Explosion möglich.

Ein Eintrag in die Umwelt ist zu vermeiden.

14. Transport information

14.1 General information

UN-No.: 1268

14.2 Road / rail transport (ADR/RID)

Hazard identification number:

33

Description:

PETROLEUM DISTILLATES, N.O.S.

Class / packing group:

3/II

Classification code:

F1

LQ (ADR 2009):

3 L

LQ (ADR 2011)

1 L

Tunnel restriction code:

D/E

14.3 Marine transport

Proper Shipping Name:

PETROLEUM DISTILLATES, N.O.S.

IMDG:

Class: 3, Code: -

EmS-No.:

F-E, S-E

14.4 Further information

None.

15. Regulatory information

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

15.1.1 National Regulations (Germany)

WGK: Extremely water hazardous (WGK – 3, self-classification, VwVwS)

Additions: No data available.

Restrictions: Observe youth labour law.
Observe law on the protection of expectant and nursing mothers.

VOC: > 95 %

15.2 Chemical safety assessment

No data available.

16. Other information

16.1 Hazard statements and R-phrases named in item 3

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H340 May cause genetic defects
H350 May cause cancer

16.2 Additional information

This information refers to the product in delivery condition.

Revised particulars: 1 – 16 (fully revised)

Legend

ACGIH: American Conference of Governmental Industrial Hygienists
AGW: Occupational exposure limit value (Arbeitsplatzgrenzwert)
AOX: Adsorbable Organohalogenes
BGW: Biological Limit Value (Biologischer Grenzwert)
VbF: Regulation concerning flammable liquids (Verordnung über brennbare Flüssigkeiten)
TLV: Threshold Limit Value (Schwellenwert)
TRbF: Technical guideline for flammable liquids (Technische Regeln für brennbare Flüssigkeiten)
VCI: (Verband der chemischen Industrie)
VOC: Volatile organic compounds
VwVwS: Regulation for non-hazardous to water substances (Verwaltungsvorschrift wassergefährdende Stoffe, German regulation)
WGK: Water hazard class (Wassergefährdungsklasse)

The information herein are to describe the product with regard to the required safety precautions, they do not intend to assure certain properties and are based upon today's standard of knowledge.

Liability excluded.