

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 B250

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

Used as mixed component to repair bitumen and asphalts

1.1.4 Product registration number Denmark: 1111432

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

1.2.1 Identified uses

Recommendation:

Used as mixed component to repair bitumen and asphalts
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
Denmark
Telefon +45 59 56 56 44
Fax +45 59 56 56 88

E-Mail (competent 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 (Mrs. 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)

This substance is not classified as hazardous according to Regulation (EC) 1272/2008.

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

This substance is not classified as hazardous according to 67/548/EEC.

2.1.3 Additional hints

Fire and explosion hazard: Low risk.

Product can form only explosive mixtures or burn, if it is heated up on temperatures above the flash point.

2.2. Label elements

Not applicable.

2.3. Other hazards

See also sections 11, 12 and 15.

3. Composition / information on Ingredients

3.1. Substances

3.1.1 General description

High-boiling mineral oil hydrocarbon mixture, with small amounts of sooty particles and polymers based on styrol-butadiene-copolymers; typical additives; contains sulphur, phosphorous, calcium, magnesium and zinc

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>
Asphalt	232-490-9 8052-42-4 --- ---	100	---	---

3.1.3 Additional hints

Full text of hazard symbols 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 In case of inhalation

Provide affected person with fresh air. In case of accident or illness/indisposition, seek medical advice immediately (show doctor directions for use or safety data sheet if possible).

4.1.2 In case of skin contact

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.

4.1.3 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.

4.1.4 In case of ingestion

Do not induce vomiting, consult a doctor immediately. Observe risk of aspiration.

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

No data available.

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

No data available.

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.

Hot product may produce flammable vapours.

Substances potentially set free in case of fire:

Oil vapour

Smoke

Carbon oxides

Nitrogen oxides

Sulphur oxides

Phosphorus oxides

Aldehydes

Hydrocarbons

Mercaptanes

Calcium oxides

Magnesium oxides

Zinc oxide

Hydrogen sulphides

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

According to extend of fire wear full protective clothing if necessary.

Dispose contaminated fire extinguishing water according to official directives.

5.3.1 Fire class (EN 2)

B (fires involving flammable or combustible liquids)

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.

Do not put any rags impregnated with the product into your trouser pockets.

Attention, risk of slipping.

6.2. Environmental precautions

Contain spillage.

Do not allow to enter drains.

Avoid entering surface waters or groundwater as well as into soil.

6.3. Methods and material for containment and cleaning up

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

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

See section 6.1.

Avoid eye and skin contact.

Avoid formation of oil spray.

Keep away from sources of ignition - refrain from smoking.

Wash hands before breaks and on finishing work.

Apply the general hygienic measures for handling of chemicals.

Pay attention to the indications on the label and to the instructions for use.

Do not heat up to temperatures near flashpoint ($T > 200^{\circ}\text{C}$).

Possibly take precautionary measures against electrostatic loading.

Possibly take precautionary measures against risk of explosion.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Requirements for storage rooms and vessels

Do not store product in alley ways and staircases.

Store only in original container and keep locked up.

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

7.2.2 Further information on storage conditions

See section 10.2.

Keep locked up and avoid humidity.

Do store in a cool place.

Storage class acc. to VCI: 10

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

8.1.1.1 Air limit values

Limit value type (country of origin)	Substance name	EG-Nr. CAS-Nr.	Limit Value	Remark
TLV-ACGIH	Mineral Oil Mist	--- ---	5 mg/m ³	

8.1.1.2 Biological limit values

No data available.

8.1.1.3 Additional exposure limits under the conditions of use

No data available.

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 sufficient aeration. This can be achieved by local exhaust ventilation or general exhaust air. If this is not sufficient to keep concentrations below AGW-values suitable respiratory protection apparatus has to be worn.

8.2.1.5 Personal protection equipment

Respiratory protection:

Not required in normal case.

In case of mineral oil mist formation, in case of vapour formation: Filter A - P2 (EN 141)

Hand protection:

Suitable are for example hand gloves from the company KCL GmbH, D-36124 Eichenzell, e-mail:

vertrieb@kcl.de with the following specification (test according to EN374):

In full contact / splash contact:

	Product name	Glove material	Layer thickness (min.)	Breakthrough time
731	Camatril	Nitril	0,33 mm	480 min
740	Dermatril	Nitril	0,11 mm	30 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374. The breakthrough times stated above were determined by KCL in laboratory tests according to EN374 and are only authoritative for the recommended glove types. Skin cream is recommendable.

Eye protection:

If there is a risk of eye contact: Eye glasses with side protection (EN 166).

Protective clothing:

Protective clothing (e.g. safety shoes EN 344, work clothes with long sleeves).

According to working process wear Apron, Boots (EN 347).

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: Black
Odour: Similar to heavy fuel oil

9.1.2 Safety relevant basis data

Boiling point / Boiling range:	No data available.	
Flashpoint:	> 250 °C (COC) > 200 °C (PM)	DIN EN ISO 2592 DIN EN ISO 2719
Ignition Temperature:	Not applicable	ASTM E 659
Lower explosion limit:	No data available.	
Upper explosion limit:	No data available.	
Vapour pressure:	No data available.	
Relative Density:	910 – 960 kg/m ³ @ 20 °C	DIN 51757
Water solubility:	Almost insoluble	
Partition coefficient (n-octanol/water):	No data available.	
Vapour density (air = 1):	Vapours, heavier than air	
Viscosity:	250 - 800 mPas @ 100 °C	DIN 53 018

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 until 300 °C.

10.3. Possibility of hazardous reactions

No data available.

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	> 3,000 mg/L	Rat	Literature
Inhalation	LC50	mg/L (4h)	No data available.	Rat	---
Dermal	LD50	mg/kg	> 3,000 mg/L	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	No data available.	---	---
Mutagenic effects	No data available.	---	---
Reproductive effects	No data available.	---	---
Narcotic effects	No data available.	---	---

11.2 Other information

It can occur:

Eye irritation.

In case of prolonged exposure:

Skin dehydration.

Skin irritation.

Dermatitis.

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

Not readily biodegradable (according to OECD criteria)
Inherently biodegradable (main ingredient indication)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Behaviour in waste water treatment plants:

Can be separated mechanically.

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 03 – other combustibles/fuels (including mixtures)

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:

Observe official regulations.

13.2 Appropriate disposal / packaging

See section 13.1

Observe official regulations.

Non-contaminated packages can be reused.

Packages that cannot be cleaned have to be disposed like the product.

14. Transport information

14.1 General information

UN-No.: 3257
Description: ELEVATED TEMPERATURE LIQUID, N.O.S.

14.2 Road / rail transport (GGVSE/ADR/RID)

Class / packing group: 9/III
Classification code: M9
LQ: n. a.

14.3 Marine transport

GGVSee / IMDG-Code: n. a.
EmS-No.: n. a.
Marine Pollutant: n. a.

14.4 Further information

Loading temperature approximately 150 °C
Labelling: 99/3257

15. Regulatory information

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

15.1.1 National Regulations (Germany)

WGK: Slightly water hazardous (WGK – 1, self-classification, VwVwS)

TA-Luft: Flash Point PM > 200 °C; Flash Point COC > 250 °C

Additions: No data available.

Observe restrictions: No data available.

Material Safety Data Sheet is available on request for professional users.

15.2 Chemical safety assessment

No data available.

16. Other information

16.1 R-phrases named in item 3

None.

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 Organohalogens
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.