

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : eni aquamet Evolution basic, Art.-no. 0785
Revision date : 01.04.2015
Print date : 28.04.2015

Version (Revision) : 3.0.0 (1.0.0)

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

1.1 Product identifier

eni aquamet Evolution basic

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

Relevant identified uses

Metal working fluids

Uses advised against

No information available.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor)

Eni Schmiertechnik GmbH

Street : Paradiesstraße 14

Postal code/city : 97080 Würzburg

Telephone : (+49) 931-90098-0

Telefax : (+49) 931-98442

Information contact : Technical Department, Tel. (+49) 931 900 98-142

email: technik.wuerzburg@agip.de, www.enischmiertechnik-datenblaetter.de

1.4 Emergency Telephone Number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

2.2 Label elements

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

Hazard pictograms



Corrosion (GHS05)

Signal word

Danger

Hazard components for labelling

3,5,5-trimethylhexanoic acid ; CAS No. : 3302-10-1

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER/doctor/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

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None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Description

Mixture of substances listed below with nonhazardous additions.

Hazardous ingredients

3,5,5-trimethylhexanoic acid ; EC No. : 221-975-0; CAS No. : 3302-10-1

Weight fraction : 5 - 10 %

Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315

PEG-9 OLEAMIDE ; CAS No. : 26027-37-2

Weight fraction : 1 - 5 %

Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

BORIC ACID ; REACH registration No. : 01-2119486683-25- ; EC No. : 233-139-2; CAS No. : 10043-35-3

Weight fraction : < 5,5 %

Classification 1272/2008 [CLP] : Repr. 1B ; H360FD

Additional information

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

3.3 Additional information

Contains Substances of the SVHC-Candidate List (Substances of Very High Concern): Boric Acid.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove victim out of the danger area. When in doubt or if symptoms are observed, get medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting.

Self-protection of the first aider

Protect your self against exposure to chemicals or blood-borne diseases by wearing gloves and eye protection. After providing first aid wash your exposed skin with soap and water.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

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5.1 Extinguishing media

Suitable extinguishing media

Foam, Extinguishing powder, Carbon dioxide (CO₂), Water spray jet, Water mist Sand,

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO₂), Carbon monoxide, Nitrogen oxides (NO_x), Smoke and other incomplete combustion products.

5.3 Advice for firefighters

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Do not inhale explosion and combustion gases. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. 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

Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/aerosols. Ventilate affected area. Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Cover drains. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Cover drains. Stop and contain spill/release if it can be done safely. Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections

See Section 8 for information on appropriate personal protective equipment.

See Section 12 for environmental precautions.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protection equipment (see chapter 8). Use only in well-ventilated areas. Open and handle container with care. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

Protective measures

Measures to prevent fire

No special fire protection measures are necessary.

Environmental precautions

Do not allow to enter into surface water or drains.

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Advices on general occupational hygiene

When using do not eat, drink, smoke. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product. Protect containers against damage.

Hints on joint storage

Keep away from: Oxidising agent

Storage class : 12

Storage class (TRGS 510) : 12

Do not store together with

Food and feedingstuffs

Further information on storage conditions

Recommended storage temperature : 20 °C

Protect against : Frost, Heat, UV-radiation/sunlight,

Storage stability : Product may be stored for up to 12 months under described conditions.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

metal working coolant

Limit value type (country of origin) : AGW (D)

Parameter : vapour + aerosol

Limit value : 10 mg/m³

Version :

BORIC ACID ; CAS No. : 10043-35-3

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 0,5 mg/m³

Peak limitation : 2(I)

Remark : Y

Version : 01.09.2012

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL/DMEL (Industrial) (BORIC ACID ; CAS No. : 10043-35-3)

Exposure route : Dermal

Exposure frequency : chronic / systemic effects

Limit value : 392 mg/kg bw/d

Limit value type : DNEL/DMEL (Industrial) (BORIC ACID ; CAS No. : 10043-35-3)

Exposure route : Inhalation

Exposure frequency : chronic / systemic effects

Limit value : 8,8 mg/m³

PNEC

Limit value type : Fresh water : (BORIC ACID ; CAS No. : 10043-35-3)

Limit value : 1,35 mg/l

Limit value type : Sea water : (BORIC ACID ; CAS No. : 10043-35-3)

Limit value : 1,35 mg/l

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Limit value type : Sediment (fresh water) : (BORIC ACID ; CAS No. : 10043-35-3)
Limit value : 1,8 mg/l
Limit value type : Sediment (sea water) : (BORIC ACID ; CAS No. : 10043-35-3)
Limit value : 1,8 mg/l
Limit value type : Sewage plant : (BORIC ACID ; CAS No. : 10043-35-3)
Limit value : 1,75 mg/l
Limit value type : Soil : (BORIC ACID ; CAS No. : 10043-35-3)
Limit value : 5,4 mg/kg

8.2 Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protection equipment

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Eye/face protection

If contact is likely : Eye glasses with side protection (DIN EN 166)

Skin protection

Hand protection

If contact is likely : Protective gloves DIN EN 374

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.

Suitable material :

Wearing time with permanent contact:

Material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber),

Thickness of the glove material: 0,70 mm

Breakthrough time (maximum wearing time): > 480 min

Wearing time with occasional contact (splashes):

NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber),

Thickness of the glove material: 0,40 mm

Breakthrough time (maximum wearing time): > 30 min

Unsuitable material : PVA (Polyvinyl alcohol),

Breakthrough time (maximum wearing time): : 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.

Body protection

Body protection: not required. If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Additional body protection measures : When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

Respiratory protection

Usually no personal respiratory protection necessary. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Respiratory protection necessary at: exceeding exposure limit values insufficient ventilation aerosol or mist formation.

General health and safety measures

When using do not eat, drink, smoke. Wash hands before breaks and after work. Wash contaminated clothing prior to re-use. Apply skin care products after work.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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Appearance : liquid
Colour : light yellow
Odour : characteristic

Safety relevant basis data

pH-value :	(4 % / 20 °C)		9 - 9,2	DIN 51369
Boiling temperature :	(1013 hPa)	>	100 °C	
Flash point :			not applicable	DIN EN ISO 2592
Pour Point:		<	-5 °C	
Flammability (Solid, Gas):			not applicable	
Lower explosion limit :			No data available	
Upper explosion limit :			No data available	
Vapour pressure :	(20 °C)		No data available	
Vapour Density (Air = 1):			no data available	
Evaporation Rate :			no data available	
Density :	(15 °C)		1,112 g/cm ³	DIN EN ISO 12185
Water solubility :	(20 °C)		miscible	
Partition Coefficient (n-octanol/water):	(log Pow)		not applicable	
Viscosity :	(20 °C)	ca.	30 mm ² /s	DIN EN ISO 3104
Ignition temperature :			No data available	
Decomposition temperature :			No data available	
Odour threshold :			No data available	
Oxidizing Properties:			not oxidising	
Explosive Properties:			not explosive	

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3 Possibility of hazardous reactions

Exothermic reaction with: Acid
Reaction with oxidizing agents possible.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Oxidising agent, strong.
Strong acid

10.6 Hazardous decomposition products

Hazardous decomposition products are not expected to form during normal storage.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological data are not available. The statement is derived from the properties of the single components.

Acute effects

No data available to indicate product may be an acute toxic oral, dermal or inhalation hazard.

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Irritant and corrosive effects

Primary irritation to the skin

Not an irritant.

Irritation to eyes

Risk of serious damage to eyes.

Sensitisation

not sensitising.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

no known significant effects or critical hazards.

Germ cell mutagenicity/Genotoxicity

no known significant effects or critical hazards.

Reproductive toxicity

no known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

STOT SE 1 and 2

Not expected to cause organ damage from a single exposure.

Specific target organ toxicity (repeated exposure)

STOT RE 1 and 2

Not expected to cause organ damage from prolonged or repeated exposure.

Aspiration hazard

Based on the available data the classification criteria for aspiration toxicity are not met. For viscosity data, see chapter 9.

11.3 Other adverse effects

Other observations

Processing vapours can irritate the respiratory tracts, skin and eyes.

SECTION 12: Ecological information

12.1 Toxicity

For the product ecotoxicological data are not available. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see chapter 3).

Aquatic toxicity

Harmless to aquatic organisms up to the tested concentration

12.2 Persistence and degradability

Part of the components is biodegradable.

12.3 Bioaccumulative potential

Contains components with the potential to bioaccumulate.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substance does not fulfill the screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other adverse effects

No information available.

12.7 Further ecological information

Do not allow uncontrolled discharge of product into the environment.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste code product

12 01 10*

Waste name

Synthetic machining oils.

Waste treatment options

Appropriate disposal / Product

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package

Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

14.4 Packing group

No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

National regulations

Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Additional information

Berufsgenossenschaftliche Regeln (BGR)

The product corresponds with TRGS 611.

15.2 Chemical Safety Assessment

No information available.

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SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Regulation for Classification, Labelling and Packaging
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effective concentration, 50 percent
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

16.3 Key literature references and sources for data

Sources of information used in preparing this SDS included one or more of the following: Product Dossiers and SDS from suppliers, complemented by public sources, as appropriate (GESTIS, the EU IUCLID Data Base, U.S. NTP publications, e.g.).

16.4 Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.

16.5 Training advice

Provide adequate information, instruction and training for operators.

16.6 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.