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

1.1 Product identifier

Trade name: Eni aquamet EPE

UFI: 2S80-T072-W00C-9EKG

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

General use: Metalworking fluid

1.3 Details of the supplier of the safety data sheet

Company name: Eni Schmiertechnik GmbH
Street/POB-No.: Paradiesstraße 14
Postal Code, city: 97080 Würzburg
Germany
WWW: www.enischmiertechnik.de
E-mail: info.wuerzburg@eni.com
Telephone: +49 (0)931-90098-0
Telefax: +49 (0)931-98442

Department responsible for information:
Application Engineering & Product Management (AEPM)
Telephone: +49 (0)931-90098-0
E-mail: technik.wuerzburg@eni.com

1.4 Emergency telephone number

GIZ-Nord, Göttingen
Telephone: +49 (0)551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Eye Irrit. 2; H319	Causes serious eye irritation.
Skin Sens. 1; H317	May cause an allergic skin reaction.
Aquatic Chronic 3; H412	Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (CLP)

Signal word: **Warning**

Hazard statements:

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P261	Avoid breathing mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of water/soap.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P501	Dispose of contents/container to hazardous or special waste collection point.

Special labelling

Text for labelling:

Contains:
1,2-Benzisothiazol-3(2H)-one
2-n-Butyl-benzo[d]isothiazol-3-one

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

The product does not contain any substances classified as PBT or vPvB.

CAS No.	Designation	PBT/vPvB	ED Human	ED Environment
95-14-7	Benzotriazole			List II

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: A mixture of base oils and additives.

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119488970-24-xxxx EC No. 203-312-7 CAS 105-59-9	2,2'-(Methylimino)diethanol Eye Irrit. 2; H319.	< 10 %
REACH 01-2119488943-21-xxxx EC No. 204-589-7 CAS 122-99-6	2-Phenoxyethanol Acute Tox. 4; H302. Eye Dam. 1; H318. STOT SE 3; H335. Acute toxicity estimate (ATE): Oral: 1394 mg/kg bw.	< 3 %
REACH 01-2119489407-26-xxxx EC No. 500-236-9 CAS 68920-66-1	Alcohols, C16-18, ethoxylated Skin Irrit. 2; H315. Aquatic Chronic 2; H411.	< 2,5 %
REACH 01-2119979079-20-xxxx EC No. 202-394-1 CAS 95-14-7	Benzotriazole Acute Tox. 4; H302. Eye Irrit. 2; H319. Aquatic Chronic 2; H411.	< 2,5 %
REACH 01-2120761540-60-xxxx EC No. 220-120-9 CAS 2634-33-5	1,2-Benzisothiazol-3(2H)-one Acute Tox. 4; H302. Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1; H317. Aquatic Acute 1; H400. Specific concentration limits (SCL): Skin Sens. 1; H317: C ≥ 0,05 % M-factors: Aquatic Acute 1: M = 10.	< 0,5 %
EC No. 420-590-7 CAS 4299-07-4	2-n-Butyl-benzo[d]isothiazol-3-one Skin Corr. 1B; H314. Eye Dam. 1; H318. Skin Sens. 1; H317. Aquatic Acute 1; H400. Aquatic Chronic 1; H410. M-factors: Aquatic Acute 1: M = 1. Aquatic Chronic 1: M = 10.	< 0,25 %

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

Additional information: Contains Triethanolamine. The maximum workplace exposure limits are, where necessary, listed in section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand.
Take off contaminated clothing and wash it before reuse.

In case of inhalation: Remove casualty to fresh air and keep warm and at rest. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen.
If unconscious place in recovery position and seek medical advice.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth and seek medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction. Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, extinguishing powder, foam, water mist, carbon dioxide.

Extinguishing media which must not be used for safety reasons:
Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire. Do not inhale explosion and combustion gases.
Furthermore, there may develop: Nitrogen oxides (NOx), traces of incompletely burned carbon compounds, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

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

Additional information: Remove persons to safety.
Use fine water spray to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely.
Contaminated fire-fighting water must be collected separately. Do not allow water used to extinguish fire to enter drains, ground or waterways.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing mist/vapours/spray. Avoid contact with the substance. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Remove all sources of ignition.
Keep unprotected people away.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. Do not allow to enter into soil/subsoil.
If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Prevent spread over a wide area (e.g. by containment or oil barriers).
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.
Never return spills in original containers for re-use.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Avoid breathing mist/vapours/spray.
Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from heat.
When handling larger quantities, take precautionary measures against electrostatic charging.
Keep away from sources of ignition - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight. Protect from frost.
storage temperature: 5 - 40 °C
storage stability: 12 months

Hints on joint storage:

Do not store together with: Oxidizing agents.
Keep away from food, drink and animal feedingstuffs.

Storage class:

10 = Combustible liquids, unless storage class 3

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
105-59-9	2,2'-(Methylimino) diethanol	Germany: DFG Kurzzeit	2 mg/m³; 0,4 ppm (Aerosol and vapour, may be absorbed through the skin)
		Germany: DFG Langzeit	2 mg/m³; 0,4 ppm (Aerosol and vapour, may be absorbed through the skin)
122-99-6	2-Phenoxyethanol	Germany: TRGS 900 Kurzzeit	5,7 mg/m³; 1 ppm (Aerosol and vapour)
		Germany: TRGS 900 Langzeit	5,7 mg/m³; 1 ppm (Aerosol and vapour)

DNEL/DMEL:

Information about 2,2'-(Methylimino)diethanol:
DNEL workers, inhalative, long-term, systemic: 7,9 mg/m³
DNEL workers, dermal, long-term, systemic: 5,6 mg/kg bw/d
DNEL workers, dermal, long-term, local: 0,05 mg/cm²

DNEL consumers, inhalative, long-term, systemic: 0,4 mg/m³
DNEL consumers, dermal, long-term, systemic: 0,67 mg/kg bw/d
DNEL consumers, dermal, long-term, local: 0,03 mg/cm²
DNEL consumers, oral, long-term, systemic: 0,13 mg/kg bw/d

Information about 2-Phenoxyethanol:
DNEL workers, inhalative, long-term, systemic: 5,7 mg/m³
DNEL workers, dermal, long-term, systemic: 20,83 mg/kg bw/d

DNEL consumers, inhalative, long-term, systemic: 2,41 mg/m³
DNEL consumers, inhalative, long-term, local: 2,41 mg/m³
DNEL consumers, dermal, long-term, systemic: 10,42 mg/kg bw/d
DNEL consumers, oral, long-term, systemic: 9,23 mg/kg bw/d

Information about Benzotriazole:
DNEL workers, inhalative, long-term, systemic: 4,2 mg/m³
DNEL workers, dermal, long-term, systemic: 0,24 mg/kg bw/d

DNEL consumers, inhalative, long-term, systemic: 2,1 mg/m³
DNEL consumers, dermal, long-term, systemic: 0,12 mg/kg bw/d
DNEL consumers, oral, long-term, systemic: 0,12 mg/kg bw/d

Information about Triethanolamine:
DNEL workers, long-term, inhalative, local: 1 mg/m³
DNEL workers, long-term, dermal, systemic: 7,5 mg/kg bw/d
DNEL workers, long-term, dermal, local: 140 µg/cm²
DNEL consumers, long-term, inhalative, local: 0,4 mg/m³
DNEL consumers, long-term, dermal, systemic: 2,66 mg/kg bw/d
DNEL consumers, long-term, dermal, local: 70 µg/cm²
DNEL consumers, long-term, oral, systemic: 3,3 mg/kg bw/d

PNEC:

Information about 2,2'-(Methylimino)diethanol:
PNEC water (freshwater): 0,278 mg/L
PNEC water (marine water): 0,028 mg/L
PNEC sediment (freshwater): 2,17 mg/kg
PNEC sediment (marine water): 0,217 mg/kg
PNEC sewage treatment plant: 10 mg/L
PNEC soil: 0,27 mg/kg

Information about 2-Phenoxyethanol:
PNEC water (freshwater): 0,943 mg/L
PNEC water (marine water): 0,094 mg/L
PNEC sediment (freshwater): 7,237 mg/Kg dw
PNEC sediment (marine water): 0,724 mg/Kg dw
PNEC sewage treatment plant: 36 mg/L
PNEC soil: 1,31 mg/kg

Information about Benzotriazole:
PNEC water (freshwater): 97 µg/L
PNEC water (marine water): 9,7 µg/L
PNEC sediment (freshwater): 1,1 mg/Kg dw
PNEC sediment (marine water): 0,11 mg/Kg dw
PNEC sewage treatment plant: 9,4 mg/L
PNEC soil: 0,169 mg/kg

Information about Triethanolamine:
PNEC water (freshwater): 0,32 mg/L
PNEC water (marine water): 0,032 mg/L
PNEC sediment (freshwater): 1,7 mg/kg
PNEC sediment (marine water): 0,17 mg/kg
PNEC sewage treatment plant: 10 mg/L
PNEC soil: 0,151 mg/kg

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

Respiratory protection must be worn whenever the WEL levels have been exceeded.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Hand protection:

Protective gloves according to DIN EN 374.

During full contact:
Glove material: NBR nitrile rubber, CR (polychloroprene, chloroprene rubber).
Breakthrough time: > 480 min
Layer thickness: 0,7 mm

During splash contact:
Glove material: NBR nitrile rubber, CR (polychloroprene, chloroprene rubber).
Breakthrough time: > 30 min
Layer thickness: 0,4 mm
Unsuitable materials: PVA (polyvinyl alcohol)
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection:

Tightly sealed goggles according to DIN EN ISO 16321-1:2022.

Body protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Avoid breathing mist/vapours/spray. Do not get in eyes, on skin, or on clothing.
Take off contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	brown
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 100 °C (1013 hPa)
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	> 100 °C (DIN EN ISO 2592)
Decomposition temperature:	Not determined
pH:	at 20 °C, 5%: 9,3 (DIN EN ISO 51369)
Viscosity, kinematic:	at 20 °C: 177 mm²/s (DIN EN ISO 3104)
Water solubility:	at 20 °C: Miscible
Partition coefficient: n-octanol/water:	not applicable
Vapour pressure:	No data available
Density:	at 15 °C: 1,015 g/mL (DIN EN ISO 12185)
Vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	Product is not explosive.
Oxidizing characteristics:	Not oxidising.
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possilbility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Protect from direct sunlight. Protect from frost.

10.5 Incompatible materials

oxidizing agents

10.6 Hazardous decomposition products

No dangerous reactions with proper and specified storage and handling.

Thermal decomposition: Not determined

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Skin Sens. 1; H317 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Symptoms

After contact with skin: slightly irritant.
After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.

Water Hazard Class: 1 = slightly hazardous to water (Self-classification (mixture).)

12.2 Persistence and degradability

Further details: Part of the components is biodegradable.

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient: n-octanol/water:
not applicable

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The product does not contain any substances classified as PBT or vPvB.

12.6 Endocrine disrupting properties

This product contains a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7 Other adverse effects

General information: Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 12 01 10* = synthetic machining oils
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.
Empty containers may contain flammable product residues. Do not cut, weld, bore, burn or incinerate emptied containers unless they have been cleaned and declared safe. Empty containers should be disposed of in accordance with local regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID, IMDG, IATA-DGR: not applicable
ADN: ID 9006

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted
ADN: ID 9006, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable
ADN: Class 9, Code: M12

14.4 Packing group

ADR/RID, ADN, IMDG, IATA-DGR:
not applicable

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.
Marine pollutant - IMDG: no

14.6 Special precautions for user

Inland waterway craft (ADN)

Hazard label: -
Transport permitted: T
Equipment necessary: PP

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - Germany

Storage class: 10 = Combustible liquids, unless storage class 3

Water Hazard Class: 1 = slightly hazardous to water (Self-classification (mixture).)

Technical guidance air: 5.2.5

Information on working limitations:

Observe employment restrictions for young people.

Further regulations, limitations and legal requirements:

The product is not subject to the Chemicals Prohibition Ordinance (ChemVerbotsV).

National regulations - EC member states

Labelling of packaging with <= 125mL content

Signal word: **Warning**

Hazard statements:	H317	May cause an allergic skin reaction.
	H412	Harmful to aquatic life with long lasting effects.
Precautionary statements:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P261	Avoid breathing mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of water/soap.
	P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
	P501	Dispose of contents/container to hazardous or special waste collection point.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 75

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H302 = Harmful if swallowed.
H314 = Causes severe skin burns and eye damage.
H315 = Causes skin irritation.
H317 = May cause an allergic skin reaction.
H318 = Causes serious eye damage.
H319 = Causes serious eye irritation.
H335 = May cause respiratory irritation.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H411 = Toxic to aquatic life with long lasting effects.
H412 = Harmful to aquatic life with long lasting effects.

Reason of change: Changes in section 8: Occupational exposure limit values

Date of first version: 25.5.2023

Department issuing data sheet: see section 1: Department responsible for information

Abbreviations and acronyms:
Acute Tox.: Acute toxicity
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
Aquatic Acute: Hazardous to the aquatic environment - acute
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Bw: Body weight
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EQ: Excepted quantities
EU: European Union
Eye Dam.: Eye damage
Eye Irrit.: Eye irritation
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
M-factor: Multiplication factor
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
Skin Corr.: Skin corrosion
Skin Irrit.: Skin irritation
Skin Sens.: Skin sensitisation
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Most recent product information is available at
http://sumdat.net/nv8zzz9