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

1.1 Product identifier

Trade name: Eni aquamet TSL

UFI: NA70-60GA-P00X-2MPD

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

General use: Metalworking fluid
Lubrication at high energy conditions in metal working operations

1.3 Details of the supplier of the safety data sheet

Company name: Enilive Schmiertechnik GmbH
Street/POB-No.: Paradiesstraße 14
Postal Code, city: 97080 Würzburg
Germany
E-mail: info.wuerzburg@enilive.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@enilive.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)

Skin Irrit. 2; H315	Causes skin irritation.
Eye Dam. 1; H318	Causes serious eye damage.
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: **Danger**

Hazard statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P501 Dispose of contents/container to hazardous or special waste collection point.

Special labelling

Text for labelling: Contains:
2-Phenoxyethanol; phosphoric acid
Ethanolamine
Dicyclohexylamine
1,2-Benzisothiazol-3(2H)-one

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% (w/w) or higher.
The product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation:

Mixture of the substances listed below with non-hazardous additions

Hazardous ingredients:

Identifiers	Designation Classification	Content
list no. 609-691-9 CAS 39464-70-5	2-Phenoxyethanol; phosphoric acid Skin Irrit. 2; H315. Eye Dam. 1; H318.	3 - < 5 %
REACH 01-2119486455-28-xxxx EC No. 205-483-3 CAS 141-43-5	Ethanolamine Acute Tox. 4; H302. Acute Tox. 4; H312. Acute Tox. 4; H332. Skin Corr. 1B; H314. Eye Dam. 1; H318. STOT SE 3; H335. Aquatic Chronic 3; H412. Specific concentration limits (SCL): STOT SE 3; H335: C ≥ 5 %	3 - < 5 %
EC No. 202-980-7 CAS 101-83-7	Dicyclohexylamine Acute Tox. 3; H301. Acute Tox. 3; H311. Skin Corr. 1B; H314. Eye Dam. 1; H318. Aquatic Acute 1; H400. Aquatic Chronic 1; H410.	< 2 %
REACH 01-2120761540-60-xxxx EC No. 220-120-9 CAS 2634-33-5	1,2-Benzisothiazol-3(2H)-one Acute Tox. 4; H302. Acute Tox. 2; H330. Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1A; H317. Aquatic Acute 1; H400. Aquatic Chronic 1; H410. Acute toxicity estimate (ATE): Oral: 450 mg/kg bw. Inhalative, dust/mist: 0,21 mg/L. Specific concentration limits (SCL): Skin Sens. 1A; H317: C ≥ 0,036 % M-factors: Aquatic Acute 1: M = 1. Aquatic Chronic 1: M = 1.	0,25 - < 0,5 %

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

Additional information: Contains Polyethylene glycol 200 - 400. 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. Seek the attention of an ophthalmologist immediately.

After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

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

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, sand, 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.
Furthermore, there may develop: Nitrogen oxides (NOx), smoke, 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: Do not inhale explosion and combustion gases. 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.
If possible, eliminate leakage. Provide adequate ventilation.
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. Do not put any product-impregnated cleaning rags into your trouser pockets. 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 sources of ignition - No smoking.
When handling larger quantities, take precautionary measures against electrostatic charging.

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
Shelf life: 12 months

Hints on joint storage: Do not store together with: Strong oxidizing agents, acids.
Keep away from food, drink and animal feedingstuffs.

Storage class: 10 = Combustible liquids that cannot be assigned to any of the above storage classes

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
141-43-5	Ethanolamine	Europe: IOELV: STEL	7,6 mg/m³; 3 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	2,5 mg/m³; 1 ppm (may be absorbed through the skin)
		Germany: TRGS 900 Kurzzeit	0,5 mg/m³; 0,2 ppm (Aerosol and vapour, may be absorbed through the skin)
		Germany: TRGS 900 Langzeit	0,5 mg/m³; 0,2 ppm (Aerosol and vapour, may be absorbed through the skin)
101-83-7	Dicyclohexylamine	Germany: TRGS 900 Kurzzeit	10 mg/m³; 1,4 ppm (Aerosol and vapour, may be absorbed through the skin)
		Germany: TRGS 900 Langzeit	5 mg/m³; 0,7 ppm (Aerosol and vapour, may be absorbed through the skin)
25322-68-3	Polyethylene glycol 200 - 400	Germany: DFG Kurzzeit	500 mg/m³ (inhalable fraction)
		Germany: DFG Langzeit	250 mg/m³ (inhalable fraction)
		Germany: TRGS 900 Kurzzeit	400 mg/m³ (inhalable fraction, Weight-average molecular weight (Mw) 200-600)
		Germany: TRGS 900 Langzeit	200 mg/m³ (inhalable fraction, Weight-average molecular weight (Mw) 200-600)

DNEL/DMEL:

Information about Ethanolamine (CAS 141-43-5):
DNEL workers, dermal, long-term, systemic: 3 mg/kg bw/d
DNEL workers, inhalative, long-term, systemic: 1 mg/m³

Information about Dicyclohexylamine (CAS 101-83-7):
DNEL workers, dermal, long-term, systemic: 0,1 mg/kg bw/d
DNEL workers, inhalative, long-term, systemic: 0,353 mg/m³

PNEC:

Information about Ethanolamine (CAS 141-43-5):
PNEC water (freshwater): 0,07 mg/L
PNEC water (marine water): 0,007 mg/L
PNEC sediment (freshwater): 0,357 mg/kg dw
PNEC sewage treatment plant: 100 mg/L

Information about Dicyclohexylamine (CAS 101-83-7):
PNEC water (freshwater): 0,00032 mg/L
PNEC water (marine water): 0,00003 mg/L
PNEC sediment (freshwater): 0,00529 mg/kg dw
PNEC sewage treatment plant: 108 mg/L

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: In case of inadequate ventilation wear 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 ISO 374-1.

During full contact:
Glove material: Nitrile rubber, polychloroprene, chloroprene rubber
Breakthrough time: > 480 min
Layer thickness: >= 0,7 mm

During splash contact:
Glove material: Nitrile rubber, polychloroprene, chloroprene rubber
Breakthrough time: > 30 min
Layer thickness: >= 0,4 mm

Unsuitable material: Polyvinyl alcohol

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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

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 put any product-impregnated cleaning rags into your trouser pockets.
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:	yellow
Odour:	characteristic
Melting point/freezing point:	No data available
Boiling point:	Not applicable
Flammability:	No data available
Lower and upper explosion limit:	No data available
Flash point:	> 100 °C (DIN EN ISO 2592)
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	at 20 °C, 5%: 9,5 (DIN 51369)
Kinematic viscosity:	at 20 °C: approx. 65 mm²/s (DIN EN ISO 3104)
Water solubility:	at 20 °C: Miscible
Partition coefficient n-octanol/water (log value):	No data available
Vapour pressure:	No data available
Density:	at 15 °C: 1,085 g/mL (DIN EN ISO 12185)

Relative vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Exothermic reactions with: Acids.

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

Strong oxidizing agents, acids.

10.6 Hazardous decomposition products

No known hazardous decomposition products.

Thermal decomposition: No data available

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): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.

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

Sensitisation to the respiratory tract: Lack of data.

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Endocrine disrupting properties:
None

Other information: Information about 2-Phenoxyethanol; phosphoric acid (CAS 39464-70-5):
LD50 Rat, oral: > 2.000 mg/kg (OECD 423)

Information about Ethanolamine (CAS 141-43-5):
LD50 Rat, oral: 1.089 mg/kg (OECD 401)
LD50 Rabbit, dermal: 1.025 mg/kg

Information about Dicyclohexylamine (CAS 101-83-7):
LD50 Rat, oral: 200 mg/kg
LD50 Rabbit, dermal: 200 - 316 mg/kg

Symptoms

Processing vapours can irritate the respiratory tracts, skin and eyes.
After eye contact:
Upon direct contact with eyes may cause burning, tearing, redness. Prolonged eye contact may damage the cornea.

SECTION 12: Ecological information

12.1 Toxicity

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

Information about 2-Phenoxyethanol; phosphoric acid (CAS 39464-70-5):
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): > 100 mg/L/48h (OECD 202)
Algae toxicity:
EC50 Pseudokirchneriella subcapitata (green algae): > 100 mg/L/72h (OECD 201)

Information about Ethanolamine (CAS 141-43-5):
Fish toxicity:
LC50 Cyprinus carpio (Common Carp): 349 mg/L/96h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 27,04 mg/L/48h (OECD 202)
Algae toxicity:
EC50 Pseudokirchneriella subcapitata (green algae): 2,8 mg/L/72h (OECD 201)

Information about Dicyclohexylamine 101-83-7):
Fish toxicity:
LC50 Danio rerio (zebrafish): 62 mg/L/96h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 8 mg/L/48h (OECD 202)
Algae toxicity:
EC50 Pseudokirchneriella subcapitata (green algae): 0,38 mg/L/72h

Water Hazard Class: 2 = obviously hazardous to water (Self-classification (mixture).)

12.2 Persistence and degradability

Further details: Part of the components is biodegradable.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
No data available

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

None

12.7 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

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.
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

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 that cannot be assigned to any of the above storage classes

Water Hazard Class: 2 = obviously hazardous to water (Self-classification (mixture).)

Technical guidance air: 5.2.5.: < 5%

Information on working limitations:
Observe employment restrictions for young people.

Further regulations, limitations and legal requirements:
The product is subject to the restrictions on use according to TRGS 611.

National regulations - EC member states

Volatile organic compounds (VOC):
0 % by weight

Labelling of packaging with <= 125mL content

Signal word: **Danger**

Hazard statements:

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
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

Classification procedure: Physical hazards: on basis of test data
Health hazards, environmental hazards: calculation method

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

H301 = Toxic if swallowed.
H302 = Harmful if swallowed.
H311 = Toxic in contact with skin.
H312 = Harmful in contact with skin.
H314 = Causes severe skin burns and eye damage.
H315 = Causes skin irritation.
H317 = May cause an allergic skin reaction.
H318 = Causes serious eye damage.
H330 = Fatal if inhaled.
H332 = Harmful if inhaled.
H335 = May cause respiratory irritation.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H412 = Harmful to aquatic life with long lasting effects.

Reason of change:
Changes in section 1: General use
Changes in section 2: Classification, labelling
Changes in section 3: Composition / Information on ingredients
Changes in section 8: Occupational exposure limit values
Changes in section 14: ADN
Changes in section 15: Regulatory information
General revision

Date of first version: 13.4.2022

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
EC50: Effective Concentration 50%
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities
EU: European Union
Eye Dam.: Eye damage
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
IMO: International Maritime Organization
LC50: Median lethal concentration
LD50: Lethal dose 50%
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
M-factor: Multiplication factor
OECD: Organisation for Economic Co-operation and Development
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:
https://sumdat.net/68zk5h9z