

Material number 435

Safety Data Sheet

Revision date:	20.3.2024
Version:	6.0
Replaces version	n: 5.3
Language:	en-DE
Date of print:	4.4.2024

Page:

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

1 of 12

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

1.1 Product identifier

Trade name: Eni aquamet GG-FAD

UFI: VA20-U0F9-X007-PTVN

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:	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	r information:
	Application Engineering & Product Management (AEPM)
	Telephone: ± 40 (0)031 00008 0

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)

Eye Irrit. 2; H319Causes serious eye irritation.Skin Sens. 1; H317May cause an allergic skin reaction.

2.2 Label elements

Labelling (CLP)



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



Safety Data Sheet

Revision date: 20.3.2024 Version: 6.0 Replaces version: 5.3 Language: en-DE Date of print: 4.4.2024

Page:

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

2 of 12

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 vapours.
	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.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	P501	Dispose of contents/container to hazardous or special waste collection point.
a		

Special labelling

Text for labelling:

Contains 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 a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria. 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: A mixture of base oils and additives.

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119527859-22-xxxx EC No. 271-781-5 CAS 68608-26-4	Sulfonic acids, petroleum, sodium salts Eye Irrit. 2; H319.	5 - 10 %
REACH 01-2119475104-44-xxxx EC No. 203-961-6 CAS 112-34-5	2-(2-Butoxyethoxy)ethanol Eye Irrit. 2; H319.	1 - 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: $C \ge 0,05 \%$ M-factors: Aquatic Acute 1: M = 10.	0,05 - 0,5 %

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

The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346. Additional information:



Material number 435

2020/878

Safety Data Sheet

Revision date:20.3.2024Version:6.0Replaces version:5.3Language:en-DEDate of print:4.4.2024

Page:

3 of 12

SECTION 4: First aid measures

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU)

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 immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.	
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, 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: Sulphur dioxide (SO2), 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: 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.



Material number 435

Safety Data Sheet

Revision date:20.3.2024Version:6.0Replaces version:5.3Language:en-DEDate of print:4.4.2024

Page:

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

4 of 12

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing mist/vapours/spray. Avoid contact with the substance. 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. Take off contaminated clothing and wash it before reuse.

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. 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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storeroon	ns 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: strong oxidizing agents. Keep away from food, drink and animal feedingstuffs.
Storage class:	10 = Combustible liquids, unless storage class 3



Material number 435

Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU)

Revision date:20.3.2024Version:6.0Replaces version:5.3Language:en-DEDate of print:4.4.2024

Page:

5 of 12

7.3 Specific end use(s)

No information available.

2020/878

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
112-34-5	2-(2-Butoxyethoxy) ethanol	Europe: IOELV: STEL	101,2 mg/m³; 15 ppm
		Europe: IOELV: TWA	67,5 mg/m ³ ; 10 ppm
		Germany: TRGS 900 Kurzzeit	100,5 mg/m ³ ; 15 ppm
			(Aerosol and vapour)
		Germany: TRGS 900 Langzeit	67 mg/m ³ ; 10 ppm
			(Aerosol and vapour)
DNEL/DMEL:	DNEL workers, ir	t 2-(2-Butoxyethoxy)ethanol: halative, long-term, local: 67,5 mg/m³ halative, short-term, local: 101,2 mg/n	
PNEC:	PNEC water (fres PNEC water (ma	t 2-(2-Butoxyethoxy)ethanol: shwater): 1,1 mg/L rine water): 0,11 mg/L (freshwater): 4,4 mg/Kg dw	

PNEC sediment (marine water): 0,44 mg/Kg dw

PNEC soil: 0,32 mg/Kg dw.

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
	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.



Material number 435

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

Revision date:	20.3.2024
Version:	6.0
Replaces version	n: 5.3
Language:	en-DE
Date of print:	4.4.2024

Page:

6 of 12

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:	green
Odour:	Characteristic
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 100 °C
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	> 140 °C (DIN EN ISO 2592)
Auto-ignition temperature:	> 240 °C
Decomposition temperature:	No data available
pH:	at 20 °C, 5%: 8,8 (DIN 51369)
Viscosity, kinematic:	at 20 °C: approx. 190 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: 0,93 g/mL (DIN EN ISO 12185)
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

Evaporation rate:

Refer to subsection "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

No data available



Material number 435

Safety Data Sheet

Revision date:20.3.2024Version:6.0Replaces version:5.3Language:en-DEDate of print:4.4.2024

Page:

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

7 of 12

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

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed. No data available

Thermal decomposition:

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: Lack of data.

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: 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.



Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

Revision date:	20.3.2024
Version:	6.0
Replaces versio	n: 5.3
Language:	en-DE
Date of print:	4.4.2024

Page:

8 of 12

11.2 Information on other hazards

Endocrine disrupting properties:

Other information:	No data available Information about Sulfonic acids, petroleum, sodium salts: LD50 Rat, oral: > 5.000 mg/kg bw"(OECD 401). LD50 Rabbit, dermal: > 5.000 mg/kg bw"(OECD 402).
	LC50 Rat, inhalative: > 1,9 mg/L/4h"(OECD 403). Information about 2-(2-Butoxyethoxy)ethanol: LD50 Mouse, oral: > 2.410 mg/kg bw (OECD 401). LD50 Rabbit, dermal: 2.764 mg/kg bw (OECD 402). LC50 Rat, inhalative: > 29 ppm Aerosol:3 mg/L/2h, (OECD 403).
	Information about 1,2-Benzisothiazol-3(2H)-one: LD50 Rat, oral: 670 mg/kg bw (OECD 401). LD50 Rat, dermal: > 2.000 mg/kg bw (OECD 402).

Symptoms

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	Information about Sulfonic acids, petroleum, sodium salts: Fish toxicity: LC50 marine water fish: > 10.000 mg/L LC50 freshwater fish: > 1.000 mg/L. Daphnia toxicity: EC50 Daphnia: > 1.000 mg/L. Algae toxicity: EC50 algae: > 1.000 mg/L.
	Information about 2-(2-Butoxyethoxy)ethanol: Fish toxicity: LC50 marine water fish: > 2.000 mg/L LC50 freshwater fish: > 1.300 mg/L. Daphnia toxicity: EC50 Daphnia magna (Big water flea): > 1.101 mg/L/48h. Algae toxicity: EC50 algae: 1.101 mg/L.
Water Hazard Class:	Information about 1,2-Benzisothiazol-3(2H)-one: Fish toxicity: LC50 Cyprinodon variegatus: 22 mg/L/96h. Daphnia toxicity: EC50 Daphnia magna (Big water flea): 2,9 mg/L/48h. (OECD 202). Algae toxicity: ErC50 Pseudokirchneriella subcapitata (green algae): 150 μg/L/72h, (OECD 201). NOErC Pseudokirchneriella subcapitata (green algae): 55 μg/L/72h, (OECD 201). 2 = obviously hazardous to water (Self-classification (mixture).)



Material number 435

Safety Data Sheet

Revision date:20.3.2024Version:6.0Replaces version:5.3Language:en-DEDate of print:4.4.2024

Page:

9 of 12

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

12.2 Persistence and degradability

Further details:

Abiotic degradation: Poorly eliminated from water. Biodegradation: Not readily biodegradable (according to OECD criteria). Main component: Evidence for inherent biodegradability.

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

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: Recommendation:	 12 01 07* = Mineral-based machining oils free of halogens (except emulsions and solutions) * = Evidence for disposal must be provided. 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, ADN, IMDG, IATA-DGR:

not applicable



Material number 435

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878 $\,$

Revision date:	20.3.2024
Version:	6.0
Replaces version	on: 5.3
Language:	en-DE
Date of print:	4.4.2024

Page:

10 of 12

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

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

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

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: 2 = obviously 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

Volatile organic compounds (VOC):

0 % by weight



Safety Data Sheet according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878

Revision date:	20.3.2024
Version:	6.0
Replaces version	n: 5.3
Language:	en-DE
Date of print:	4.4.2024

Page:

11 of 12

Labelling of packaging with <= 125mL content \wedge

Cirral words		
Signal word:	Warning	
Hazard statements:	H317	May cause an allergic skin reaction.
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 vapours.
	P280	Wear protective gloves/protective clothing/eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of water/soap.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	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, 55, 75.

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrase	es under paragraph 2 and 3:
	H302 = Harmful if swallowed.
	H315 = Causes skin irritation.
	H317 = May cause an allergic skin reaction.
	H318 = Causes serious eye damage.
	H319 = Causes serious eye irritation.
	H400 = Very toxic to aquatic life.
Reason of change:	Changes in section 1: Details of the supplier of the safety data sheet
	General revision
Date of first version:	4.3.2022
Department issuing data sheet:	
	see section 1: Department responsible for information



2020/878

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU)

Revision date: 20.3.2024 Version: 6.0 Replaces version: 5.3 Language: en-DE Date of print: 4.4.2024

Page:

12 of 12

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 AS/NZS: Australian Standards/New Zealand Standards 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% 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 LC50: Median lethal concentration I D50[·] 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 Irrit.: Skin irritation Skin Sens.: Skin sensitisation 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/nqzkqxuk