

Safety Data Sheet

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



Trade name : eni aquamet LMK 2020 Plus, Art.-no. 1854
Revision date : 01.04.2015
Print date : 20.04.2015

Version (Revision) : 5.0.0 (4.0.0)

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

1.1 Product identifier

eni aquamet LMK 2020 Plus

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

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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]

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Category 3 ; Harmful to aquatic life with long lasting effects.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2A ; Causes serious eye irritation.

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

2.2 Label elements

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

Hazard pictograms



Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Special rules for supplemental label elements for certain mixtures

EUH208 Contains 3-IODO-2-PROPYNYL BUTYLCARBAMATE. May produce an allergic reaction.

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Description

Preparation of solvent refined mineral oils with low content of aromatic hydrocarbons and additives.

Hazardous ingredients

2-(2-BUTOXYETHOXY)ETHANOL ; REACH registration No. : 01-2119475104-44-0006 ; EC No. : 203-961-6; CAS No. : 112-34-5

Weight fraction : 1 - 2,5 %

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

1-AMINOPROPAN-2-OL ; REACH registration No. : 01-2119475331-43-0000 ; EC No. : 201-162-7; CAS No. : 78-96-6

Weight fraction : 1 - 3 %

Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Acute Tox. 4 ; H312

1H-BENZOTRIAZOLE (1,2,3) ; REACH registration No. : 01-2119979079-20-XXXX ; EC No. : 202-394-1; CAS No. : 95-14-7

Weight fraction : 0,5 - 1 %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

DICYCLOHEXYLAMINE ; REACH registration No. : 01-2119493354-33-0000 ; EC No. : 202-980-7; CAS No. : 101-83-7

Weight fraction : < 2 %

Classification 1272/2008 [CLP] : Acute Tox. 3 ; H301 Acute Tox. 3 ; H311 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

3-IODO-2-PROPYNYL BUTYLCARBAMATE ; EC No. : 259-627-5; CAS No. : 55406-53-6

Weight fraction : 0,1 - 0,5 %

Classification 1272/2008 [CLP] : Acute Tox. 3 ; H331 STOT RE 1 ; H372 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Further ingredients

The highly refined mineral oil contains less than 3% (w/w) DMSO-extract, according to IP 346 and is not considered to be carcinogenic.

Additional information

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

In case of inhalation

Remove victim out of the danger area. Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

In case of skin contact

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

After eye contact

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Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Call a physician immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps.

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

5.1 Extinguishing media

Suitable extinguishing media

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

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), Phosphorus oxides, Smoke and other incomplete combustion products.

5.3 Advice for firefighters

Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No action shall be taken involving any personal risk or without suitable training.

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. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. 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. Remove persons to safety. Avoid contact with skin, eyes and clothes. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/aerosols. Special danger of slipping by leaking/spilling product. Remove all sources of ignition.

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

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Clear spills immediately. 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. Ventilate affected area. 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. Always close containers tightly after the removal of product. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Keep away from sources of ignition. - No smoking.

Protective measures

Measures to prevent fire

Only use the material in places where open light, fire and other flammable sources can be kept away.

Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Shafts and sewers must be protected from entry of the product.

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. Use protective skin cream before handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Packaging materials

Only use containers specifically approved for the substance/product.

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage. Floors should be impervious, resistant to liquids and easy to clean.

Hints on joint storage

Keep away from: Oxidising agent

Storage class : 10

Storage class (TRGS 510) : 10

Do not store together with

Food and feedingstuffs

Further information on storage conditions

Recommended storage temperature : 5 - 40°C / 40 - 105°F.

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

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

DICYCLOHEXYLAMINE ; CAS No. : 101-83-7

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

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Limit value : 0,7 ppm / 5 mg/m³
Remark : H, Y, 11
Version :

2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 10 ppm / 67 mg/m³
Peak limitation : 1,5(I)
Remark : Y
Version : 01.09.2012

Limit value type (country of origin) : STEL (EC)
Limit value : 15 ppm / 101,2 mg/m³
Version : 07.02.2006

Limit value type (country of origin) : TWA (EC)
Limit value : 10 ppm / 67,5 mg/m³
Version : 07.02.2006

1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 2 ppm / 5,8 mg/m³
Peak limitation : 2(I)
Version : 01.09.2012

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type : DNEL/DMEL (Professional) (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Exposure route : Dermal
Exposure frequency : Long-term (repeated)
Limit value : 3,5 mg/kg

Limit value type : DNEL/DMEL (Professional) (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Exposure route : Inhalation
Exposure frequency : Long-term (repeated)
Limit value : 4,5 mg/m³

Limit value type : DNEL/DMEL (Industrial) (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Exposure route : Dermal
Exposure frequency : chronic / systemic effects
Limit value : 0,1 mg/kg

Limit value type : DNEL/DMEL (Industrial) (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Exposure route : Inhalation
Exposure frequency : chronic / systemic effects
Limit value : 0,353 mg/m³

Limit value type : DNEL/DMEL (Industrial) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Exposure route : Inhalation
Exposure frequency : chronic / systemic effects
Limit value : 67,5 mg/m³

Limit value type : DNEL/DMEL (Industrial) (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Exposure route : Dermal
Exposure frequency : chronic / systemic effects
Limit value : 20 mg/kg

Limit value type : DNEL/DMEL (Worker, Systemic) (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Exposure route : Dermal
Limit value : 1,08 mg/kg bw/d

Limit value type : DNEL/DMEL (Worker, Systemic) (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Exposure route : Inhalation
Limit value : 19 mg/m³

Remark

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The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation.

PNEC

Limit value type :	Fresh water : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	0,0327 mg/l
Limit value type :	Sea water : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	0,00327 mg/l
Limit value type :	Sediment (fresh water) : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	0,177 mg/kg
Limit value type :	Sediment (sea water) : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	0,0177 mg/kg
Limit value type :	Sewage plant : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	3,3 mg/l
Limit value type :	Soil : (1-AMINOPROPAN-2-OL ; CAS No. : 78-96-6)
Limit value :	0,0161 mg/kg
Limit value type :	Fresh water : (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	0,00032 mg/l
Limit value type :	Sea water : (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	0,00003 mg/l
Limit value type :	Water (sporadic release): (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	0,033 mg/l
Limit value type :	Sediment (fresh water) : (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	0,00529 mg/l
Limit value type :	Sewage plant : (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	108,2 mg/l
Limit value type :	Soil : (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Limit value :	0,00168 mg/kg
Limit value type :	Fresh water : (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Limit value :	1 mg/l
Limit value type :	Sea water : (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Limit value :	0,1 mg/l
Limit value type :	Sediment (fresh water) : (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Limit value :	4 mg/kg
Limit value type :	Sediment (sea water) : (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Limit value :	0,4 mg/kg
Limit value type :	Sewage plant : (2-(2-BUTOXYETHOXY)ETHANOL ; CAS No. : 112-34-5)
Limit value :	200 mg/l
Limit value type :	PNEC aquatic, freshwater (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Limit value :	0,0194 mg/l
Limit value type :	PNEC aquatic, marine water (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Limit value :	0,0194 mg/l
Limit value type :	PNEC sediment, freshwater (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Limit value :	0,00375 mg/kg
Limit value type :	PNEC sediment, marine water (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Limit value :	0,00375 mg/kg
Limit value type :	PNEC sewage treatment plant (STP) (1H-BENZOTRIAZOLE (1,2,3) ; CAS No. : 95-14-7)
Limit value :	39,4 mg/l

8.2 Exposure controls

Appropriate engineering controls

Use only in well-ventilated areas. If handled uncovered, arrangements with local exhaust ventilation should be used if

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possible. 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

Eye glasses with side protection (DIN EN 166)

Skin protection

Hand protection

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. Tested protective gloves must be worn: DIN EN 374 Do not wear gloves near rotary machines and tools.

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):

Material: 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. Check leak tightness/impermeability prior to use.

Body protection

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. Do not put any product-impregnated cleaning rags into your trouser pockets. Wash contaminated clothing prior to re-use. Apply skin care products after work.

Environmental exposure controls

Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : yellow

Odour : mineral oil like

Safety relevant basis data

pH value : (20 °C / 5 Wt %) 9,9 DIN 51369

Melting point/melting range : No data available

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Boiling temperature :	(1013 hPa)	>	100	°C	
Flash point :		>	130	°C	DIN EN ISO 2592
Lower explosion limit :			0,6	Vol-%	
Upper explosion limit :			6,5	Vol-%	
Vapour Density (Air = 1):			no data available		
Evaporation Rate :			no data available		
Density :	(15 °C)		0,952	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.	220	mm ² /s	DIN EN ISO 3104
Ignition temperature :		>	240	°C	
Decomposition temperature :			No data available		
Odour threshold :			No data available		
Oxidizing Properties:			not oxidising		
Explosive Properties:			not explosive		
Maximum VOC content (EC) :			0	Wt %	
Maximum VOC content (Switzerland) :			1,12	Wt %	

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Oxidising agent, strong.

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. Data apply to the main component.

Acute effects

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

Acute oral toxicity

Parameter :	LD50 (BASEOIL)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg

Acute dermal toxicity

Parameter :	LD50 (BASEOIL)
Exposure route :	Dermal

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Species : Rabbit
Effective dose : > 2000 mg/kg

Acute inhalation toxicity

Parameter : LC50 (BASEOIL)
Exposure route : Inhalation
Species : Rat
Effective dose : > 5,53 mg/l
Exposure time : 4 h

Irritant and corrosive effects

Irritating to eyes and skin.

Sensitisation

Contains components in low concentrations (< 1%) that present a skin-sensitizing potential.

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

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute (short-term) fish toxicity

Parameter : LC50 (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Species : Leuciscus idus (golden orfe)
Effective dose : 12 mg/l
Exposure time : 96 h
Method : OECD 203

Acute (short-term) daphnia toxicity

Parameter : EC50 (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Species : Daphnia magna (Big water flea)
Effective dose : 8 mg/l
Exposure time : 48 h
Method : OECD 202

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Acute (short-term) algae toxicity

Parameter : EC50 (DICYCLOHEXYLAMINE ; CAS No. : 101-83-7)
Species : Scenedesmus subspicatus
Effective dose : 3,3 mg/l
Exposure time : 72 h
Method : OECD 201

12.2 Persistence and degradability

Abiotic degradation

Physicochemical elimination

Poorly eliminated from water.

Biodegradation

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.

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 07*

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

(**Waste key of the emulsion:** 12 01 09*)

Waste name

Mineral-based machining oils free of halogens (except emulsions and solutions).

Waste treatment options

Appropriate disposal / Product

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

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.

Other disposal recommendations

Containers, even those that have been emptied, can contain product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, drill, grind, weld or perform similar operations on or near containers.

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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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 - 10 %

Water hazard class (WGK)

Class : 2 (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.

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

Safety Data Sheet

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



Trade name : eni aquamet LMK 2020 Plus, Art.-no. 1854
Revision date : 01.04.2015
Print date : 20.04.2015

Version (Revision) : 5.0.0 (4.0.0)

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)

H301+H311	Toxic if swallowed or in contact with skin.
H302	Harmful if swallowed.
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.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
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.

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.