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

1.1 Product identifier

Trade name: Eni Antifreeze Spezial 12++

UFI: 04JN-83R1-Q00K-HFH4

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

General use: Radiator antifreeze

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)

Acute Tox. 4; H302 Harmful if swallowed.
STOT RE 2; H373 May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (CLP)



Signal word: **Warning**

Hazard statements:	H302	Harmful if swallowed.
	H373	May cause damage to organs through prolonged or repeated exposure.
Precautionary statements:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P260	Do not breathe mist/vapours/spray.
	P264	Wash hands and face thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P314	Get medical advice/attention if you feel unwell.
	P501	Dispose of contents/container to hazardous or special waste collection point.

Special labelling

Text for labelling: Contains: ethylene glycol

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 as PBT or vPvB classified substances.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119456816-28-xxxx EC No. 203-473-3 CAS 107-21-1	Ethylene glycol Acute Tox. 4; H302. STOT RE 2; H373.	75 - 100 %
REACH 01-2120762063-61-xxxx EC No. 241-300-3 CAS 17265-14-4	Disodium sebacate Eye Irrit. 2; H319.	< 5 %
EC No. 265-004-9 CAS 64665-57-2	Sodium 4(or 5)-methyl-1H-benzotriazolide Acute Tox. 4; H302. Skin Corr. 1B; H314. Repr. 2; H361d. Aquatic Chronic 2; H411.	< 0,2 %

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

Additional information: Contains: ethylene glycol. inhibitors

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.
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

In case of inhalation: Remove the casualty into fresh air and keep them calm.
In the events of symptoms take medical treatment.

Following skin contact: Thoroughly wash skin with soap and water. Take off contaminated clothing and wash it before reuse. 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. In case of vomiting, lay at least head on side. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed.
Spasms, drowsiness, nausea, vomiting, gastrointestinal complaints, pain, oedema (swelling).

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may occur with delay.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: water spray jet, alcohol resistant foam, extinguishing powder

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

5.2 Special hazards arising from the substance or mixture

Combustible. In case of fire may be liberated: Smoke, traces of incompletely burned carbon compounds, nitrogen oxides (NOx), 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: Cool endangered containers with water jetspray.
Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Eliminate all ignition sources if safe to do so. Avoid the formation of aerosol. Avoid contact with the substance. Do not breathe mist/vapours/spray. Wear appropriate protective equipment. Keep unprotected people away.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Large amounts of spillages:
Plug leak if safely possible. Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Thoroughly clean the contaminated area with water.

Small amounts of spillages:
Wipe up with absorbent material (eg. cloth, fleece). Final cleaning.

Spilled product must never be returned to the original container for recycling.

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 the formation of aerosol. Avoid contact with the substance. Do not breathe mist/vapours/spray.
Handle and open container with care. Wear appropriate protective equipment. Take off contaminated clothing. When using do not eat or drink. Wash hands before breaks and after work. Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:
Take care of general rules for industrial preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:
Keep container tightly closed and in a well-ventilated place. Keep only in the original container.
Keep container tightly closed in a cool place.

Hints on joint storage:
Do not store together with: strong acids, strong oxidizing agents, nitrates, peroxides, chlorates
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
107-21-1	Ethylene glycol	Europe: IOELV: STEL	104 mg/m³; 40 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	52 mg/m³; 20 ppm (may be absorbed through the skin)
		Germany: TRGS 900 Kurzzeit	52 mg/m³; 20 ppm (Aerosol and vapour, may be absorbed through the skin)
		Germany: TRGS 900 Langzeit	26 mg/m³; 10 ppm (Aerosol and vapour, may be absorbed through the skin)

DNEL/DMEL:
Information about Ethylene glycol:
DNEL workers, inhalative, local, long-term: 35 mg/m³
DNEL workers, dermal, systemic, long-term: 106 mg/kg bw/d
DNEL consumers, inhalative, local, long-term: 7 mg/m³
DNEL consumers, dermal, systemic, long-term: 53 mg/kg bw/d

PNEC:
Information about ethylene glycol:
PNEC water (freshwater): 10 mg/L
PNEC water (marine water): 1 mg/L
PNEC sediment (freshwater): 37 mg/kg dw
PNEC sediment (marine water): 3,7 mg/kg dw
PNEC soil: 1,53 mg/kg dw
PNEC sewage treatment plant STP: 199,5 mg/L

8.2 Exposure controls

Provide adequate ventilation, and local exhaust as needed.

Personal protection equipment

Occupational exposure controls

Respiratory protection:
Respiratory protection must be worn whenever the WEL levels have been exceeded.
Use filter type A (= against vapours of organic substances) according to BS EN 14387.
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 EN 374. Glove material: nitrile rubber - Layer thickness: 0,4 mm butyl caoutchouc (butyl rubber) - Layer thickness: 0,7 mm Breakthrough time: >30 min Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	Tightly sealed goggles according to BS EN ISO 16321-1:2022.
Body protection:	Wear suitable protective clothing.

General protection and hygiene measures:

Avoid the formation of aerosol. Avoid contact with the substance. Avoid contact with skin and eyes. Do not breathe mist/vapours/spray.
Handle and open container with care. Take off contaminated clothing. When using do not eat or drink. Wash hands before breaks and after work. 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:	pink
Odour:	product-specific
Odour threshold:	No data available
Melting point/freezing point:	<= -18 °C (DIN ISO 3016)
Initial boiling point and boiling range:	> 160 °C (ASTM D1120)
Flammability:	Combustible
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	> 124 °C (DIN EN 22719)
Auto-ignition temperature:	420 °C (DIN 51794)
Decomposition temperature:	No data available
pH:	at 20 °C: approx. 8 (ASTM D1287, not diluted)
Viscosity, kinematic:	at 20 °C: 20 - 30 mm²/s (DIN 51562)
Water solubility:	at 20 °C: miscible
Partition coefficient: n-octanol/water:	-1,36 log K(o/w) (Ethylene glycol) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Vapour pressure:	at 20 °C: 0,2 hPa
Density:	at 20 °C: 1,122 - 1,125 g/mL (DIN 51757)
Vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	Not explosive
Oxidizing characteristics:	Not oxidising
Auto-ignition temperature:	No data available
Evaporation rate:	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 dangerous reactions with proper and specified storage and handling.

10.4 Conditions to avoid

Keep away from sources of ignition and heat. Heating causes rise in pressure with risk of bursting.

10.5 Incompatible materials

Strong acids, strong oxidizing agents, nitrates, peroxides, chlorates

10.6 Hazardous decomposition products

Ketone, aldehydes

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): Acute Tox. 4; H302 = Harmful if swallowed.
ATEmix calculated (human): approx. 1600 mg/kg

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

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

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: 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): STOT RE 2; H373 = May cause damage to organs through prolonged or repeated exposure.
Possible: damage of kidneys

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties: None

Other information: Information about Ethylene glycol:
LD50 Rat, oral: 7.712 mg/kg
ATE: 500 mg/kg
LD50 Mouse, dermal: > 3.500 mg/kg
LC50 Rat, inhalative (aerosol): 2,5 mg/L/6h

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about Ethylene glycol:
Fish toxicity:
LC50 Pimephales promelas (fathead minnow): > 72.860 mg/L/96 h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): > 100 mg/L/48h (OECD 202)

Water Hazard Class: 1 = slightly hazardous to water

12.2 Persistence and degradability

Further details: Degree of elimination: > 70% DOC reduction/28 d (OECD 301A). Easily bio-degradable.
Information about Ethylene glycol: Biodegradation: 90 - 100 %/10 d (OECD 301 A)

Effects in sewage plants: Bacterial toxicity:
EC20 activated sludge: > 1.995 mg/L/30 min

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
-1,36 log K(o/w) (Ethylene glycol)
Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

None

12.7 Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 16 01 14* = antifreeze fluids containing hazardous substances
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.

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.

SECTION 14: Transport information

14.1 UN number or ID number

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

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: 1 = slightly hazardous to water

Technical guidance air: 5.2.5

Information on working limitations:
Observe employment restrictions for young people.
Observe employment restrictions for expectant or nursing mothers.

Further regulations, limitations and legal requirements:
No data available

National regulations - EC member states

Further regulations, limitations and legal requirements:
Use restriction according to REACH annex XVII, no.: 3

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.
H319 = Causes serious eye irritation.
H361d = Suspected of damaging the unborn child.
H373 = May cause damage to organs through prolonged or repeated exposure.
H411 = Toxic to aquatic life with long lasting effects.

Reason of change: General revision (Information about: Endocrine disrupting properties)

Date of first version: 30.12.2020

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 Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
ATE: Acute toxicity estimate
ATEmix: Acute Toxicity Estimate of mixture
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
DOC: Dissolved Organic Carbon
EC: European Community
EC50: Effective Concentration 50%
EN: European Standard
EQ: Excepted quantities
EU: European Union
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
LD50: Lethal dose 50%
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
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
Repr.: Reproductive toxicity
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
Skin Corr.: Skin corrosion
STOT RE: Specific target organ toxicity - repeated 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/tmrb3qyb