

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



RHOLIATE

Version	Revision Date:	SDS Number:	Date of last issue: 22.10.2024
13.0	17.06.2025	106108	Date of first issue: 03.04.2021

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

1.1 Product identifier

Trade name	:	RHOLIATE
Product code	:	106108
Substance name	:	Ethyl 2,3,6-trimethylcyclohexyl carbonate
CAS-No.	:	93981-50-1
EC-No.	:	301-136-6
Customer Material No.	:	36047090

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

Use of the Sub- stance/Mixture	:	Fragrance
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1.3 Details of the supplier of the safety data sheet

Company	:	Symrise AG Mühlenfeldstrasse 1 37603 Holzminden
Telephone	:	+495531900
Telefax	:	+495531901649
E-mail address of person responsible for the SDS	:	sds@symrise.com

1.4 Emergency telephone number

Emergency CONTACT (24-Hour-Number)
GBK/Infotrac ID 101844: +49(6132)9829021

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.
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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms	:	
Hazard statements	:	H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P273 Avoid release to the environment. Response: P391 Collect spillage. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	:	Ethyl 2,3,6-trimethylcyclohexyl carbonate
CAS-No.	:	93981-50-1
EC-No.	:	301-136-6

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Do not leave the victim unattended.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. If symptoms persist, call a physician.
In case of skin contact	:	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye.

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If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.

Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

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If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,
acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the ap-
plication area.

Advice on protection against : Normal measures for preventive fire protection.
fire and explosion

Hygiene measures : General industrial hygiene practice. When using do not eat or
drink. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage : No smoking. Containers which are opened must be carefully
areas and containers resealed and kept upright to prevent leakage. Electrical instal-
lations / working materials must comply with the technological
safety standards.

Advice on common storage : No materials to be especially mentioned.

Storage class (TRGS 510) : 10

Further information on stor- : No decomposition if stored and applied as directed.
age stability

7.3 Specific end use(s)

Specific use(s) : Fragrance

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

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8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection

Remarks : Preventive skin protection

Skin and body protection : Work uniform or laboratory coat.

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : clear liquid

Colour : colorless

Odour : characteristic

Odour Threshold : No data available

Melting point/freezing point : < -20 °C(Setting point)

Boiling point/boiling range : 240,6 °C
Method: OECD Test Guideline 103
GLP: no

Flammability : not determined

Upper explosion limit / Upper flammability limit : Vapours may form explosive mixtures with air.

Lower explosion limit / Lower flammability limit : Vapours may form explosive mixtures with air.

Flash point : 100 °C

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Decomposition temperature : not determined

pH : Not applicable

Viscosity
Viscosity, dynamic : not determined

Viscosity, kinematic : not determined

Solubility(ies)
Water solubility : 0,0123 g/l (20 °C)
Method: OECD Test Guideline 105
GLP: no
immiscible

Partition coefficient: n-
octanol/water : log Pow: 4,94 (25 °C)
Method: OECD 117
GLP: no

Vapour pressure : 0,002 hPa (20 °C)

< 1 kPa (50 °C)
calculated

Relative density : 0,9640 - 0,9740 (20 °C)
relation to density of water at 4°C

Bulk density : Not applicable

Relative vapour density : not determined

9.2 Other information

Explosives : Due to its structural properties, the product is not classified as explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Self-ignition : The substance or mixture is not classified as self heating.

Evaporation rate : Lower than the evaporation rate of butyl acetate = 1

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Molecular weight : 214,05 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Not applicable

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat, male and female): > 15.000 mg/kg
GLP: no

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Humans
Exposure time : 24 h
Result : No skin irritation
GLP : no
Concentration : 1,5 %
solvents : Vaseline

Serious eye damage/eye irritation

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

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Product:

Species	:	Rabbit
Result	:	No eye irritation
GLP	:	no
Dose	:	0,1 ML
Concentration	:	1,5 %
solvents	:	Peanut oil

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

Not classified based on available information.

Product:

Test Type	:	Buehler Test
Species	:	Guinea pig
Result	:	No sensitizing effect.
GLP	:	no
Concentration	:	1,5 %
solvents	:	Peanut oil

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Not classified based on available information.

Further information

Product:

Remarks	:	No data available
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SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Zebrafish (Brachydanio rerio)): 8,33 mg/l
Exposure time: 96 h
Test Type: static test
GLP: no

12.2 Persistence and degradability

Product:

Biodegradability : Test Type: Closed Bottle test
Result: Not readily biodegradable.
Biodegradation: 3 %
Exposure time: 28 d
Method: OECD 301D
GLP: yes

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Send to a licensed waste management company.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
IATA	:	UN 3082

14.2 UN proper shipping name

ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYL-2,3,6-TRIMETHYLCYCLOHEXYL CARBONATE)
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYL-2,3,6-TRIMETHYLCYCLOHEXYL CARBONATE)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYL-2,3,6-TRIMETHYLCYCLOHEXYL CARBONATE)
IATA	:	Environmentally hazardous substance, liquid, n.o.s. (ETHYL-2,3,6-TRIMETHYLCYCLOHEXYL CARBONATE)

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	:	9
RID	:	9
IMDG	:	9
IATA	:	9

14.4 Packing group

ADR		
Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)
RID		
Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
IMDG		
Packing group	:	III

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Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Cargo)

Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL HAZARDS	Quantity 1 200 t	Quantity 2 500 t
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Water hazard class (Germany) : WGK 2 obviously hazardous to water
Code Number: 5.877

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific

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material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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