



RAVENOL OTC Premix -40°C Protect C12+



ART.-NR. 1410112

1,5 L | 1410112-150
5 L | 1410112-005
20 L | 1410112-020
20 L | 1410112-B20
1000 L | 1410112-700

FREIGABE MAN 324 SNF (FÜR KONZENTRAT) | DEUTZ DQC CB-14 | MB-FREIGABE 325.3

EMPFEHLUNGEN VW/AUDI TL 774-D (ENTSPRICHT G12+) | MB 326.3 (PREMIX) | OPEL GM 6277 M | OPEL GM B 040 1065 | FORD WSS-M97B44-D (AB MODELL 1999) | FORD 1336797 | FORD 1336807 | FORD 1365305 | PORSCHE | MITSUBISHI 0103044 | MITSUBISHI 0103045 | MITSUBISHI MZ311986 | TOYOTA 08889-00115 | TOYOTA 08889-01005 | TOYOTA 08889-80014 | TOYOTA 08889-80015 | TOYOTA 00272-1LLAC | VOLVO 9437650 | VW G012A8FM1 | VW G012A8FM8 | VW G012A8FM9 | DAF 74002 | JAGUAR LAND ROVER STJLR 651.5003 | JAGUAR JLM209722 | LAND ROVER STC50529

RAVENOL OTC Premix -40°C Protect C12+ ist ein anwendungsfertiges, bereits mit Wasser vorgemischtes umweltfreundliches silikat-, borat-, nitrit- und phosphatfreies Kühlerschutzmittel für Kühlkreisläufe von Verbrennungsmotoren auf der Basis von 1.2- Ethandiol (Monoethylenglykol), das einen wartungsfreien Korrosions- und Frostschutz gewährleistet. Das Produkt ist auf Basis einer bewährten Inhibitor Entwicklung mit der organischen Additiv-Technologie OAT als Langzeit-Kühlerschutz formuliert.

Entscheidend für die Qualität eines Kühlerschutzmittels ist nicht mehr nur die Frostschutzwirkung (die bei einem Produkt auf Ethylenglykol-Basis automatisch vorhanden ist), sondern die Rostschutzwirkung. Deshalb unterwerfen die Automobilhersteller die Kühlerschutzmittel langwierigen Korrosions- und Kavitationstests.

RAVENOL OTC Premix -40°C Protect C12+ schützt das Kühlsystem vor Korrosion, Frost und im Sommer vor Überhitzung.

Anwendungshinweis

RAVENOL OTC Premix -40°C Protect C12+ ist eine bereits vorgemischte Kühlflüssigkeit mit Frost- und Rostschutzwirkung für den Ganzjahreseinsatz in KFZ-Motoren.

Auch im Sommer muss ausreichend Kühlerschutzmittel im Kühlwasser enthalten sein, um guten Korrosions- und Überhitzungsschutz zu gewährleisten.

Gebrauchsanweisung: Fehlmengen im Kühler mit **RAVENOL OTC Premix -40°C Protect C12+** auffüllen.

RAVENOL OTC Premix -40°C Protect C12+ kann auch als gebrauchsfertige Mischung in Erdwärmesonden und Erdwärmekollektoren eingesetzt werden gemäß der Empfehlungsliste der LAWA (Bund/Länder-Arbeitsgemeinschaft Wasser in Deutschland).

RAVENOL OTC Premix -40°C Protect C12+ ist aufgenommen in die Empfehlungsliste der LAWA für wasserwirtschaftliche Anforderungen an Erdwärmesonden und Erdwärmekollektoren.



Eigenschaften

RAVENOL OTC Premix -40°C Protect C12+bietet:

- Ausgezeichnete Eignung für Leichtmetall-Motoren.
- Gute Reservealkalität.
- Optimaler Korrosionsschutz durch hochwertige Korrosionszusätze für alle im Kühlsystem verwendeten Metalle und Metall-Legierungen einschließlich Aluminium.
- Verhinderung von Ablagerungen und Schaumbildung im Kühlsystem.
- Elastomerverträglichkeit mit den in Kühlern von KFZ verwendeten Elastomeren.
- Mischbarkeit mit anderen Kühlerfrostschutzsorten.

Eigenschaften	Einheit	Daten	Prüfung nach
Dichte bei 20°C	kg/m ³	1070	EN ISO 12185
Farbe		violett / lila	visuell
pH- Wert		7,8	ASTM D 1287
Gefrierpunkt	°C	-40°C	ASTM D 1177

Alle Angaben entsprechen nach bestem Wissen dem derzeitigen Stand der Erkenntnisse und unserer Entwicklung. Änderungen bleiben vorbehalten. Alle Bezugnahme auf DIN-Normen dienen nur der Warenbeschreibung und stellen keine Garantie dar. Bei vorliegenden Problemfällen technische Beratung anfordern.

Stand: 30. Oktober 2020



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

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

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

1.1. Product identifier

Trade name/designation:

RAVENOL OTC Organic Techn. Coolant Premix -40°C

Article No.:

1410112

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

Use of the substance/mixture:

Antifreeze agent

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Ravensberger Schmierstoffvertrieb GmbH

Jöllenbecker Str. 2

33824 Werther

D

Telephone: +49 5203 9719 0

Telefax: +49 5203 9719 40

E-mail: kontakt@ravenol.de

Website: www.ravenol.de

E-mail (competent person): technik@ravenol.de

* 1.4. Emergency telephone number

Abt. Technik (Produktsicherheit), 24h: +49 700 24 112 112 (Company ID: RAV) (outside USA/Canada)
011 49 700 24 112 112 (Company ID: RAV) (inside USA/Canada), +49 5203 9719 0 (Mo-Do 7.30 Uhr -
16.30 Uhr, Fr 7.30 Uhr - 13.15 Uhr) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-repeated exposure (<i>STOT RE 2</i>)	H373: May cause damage to organs through prolonged or repeated exposure. (...)	

* 2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark



GHS08

Health hazard

Signal word: Warning

Hazard components for labelling:

potassium 2-ethylhexanoate; ethane-1,2-diol; 2,2'-oxydiethanol



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

hazard statements for health hazards

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure. (kidneys, oral)

Supplemental Hazard information (EU): -

Precautionary statements Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264.1	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Precautionary statements Response

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/Emergency telephone number.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Precautionary statements Disposal

P501.2	Dispose of contents/container to an appropriate recycling or disposal facility.
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2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CL P]	Concentration
CAS No.: 107-21-1 EC No.: 203-473-3 REACH No.: 01-2119456816-28-0000	ethane-1,2-diol Acute Tox. 4, STOT RE 2 Warning H302-H373	30 - < 60 Wt %
CAS No.: 111-46-6 EC No.: 203-872-2 INDEX No.: 603-140-00-6	2,2'-oxydiethanol Acute Tox. 4 Warning H302	1 - < 10 Wt %
CAS No.: 3164-85-0 EC No.: 221-625-7	potassium 2-ethylhexanoate Eye Dam. 1, Repr. 2, Skin Irrit. 2 H315-H318-H361d	1 - < 2 Wt %

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

In case of respiratory tract irritation, consult a physician. Provide fresh air. Get immediate medical advice/attention.

In case of skin contact:

In case of skin irritation, consult a physician. After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Causes serious eye irritation.



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

After ingestion:

If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. If unconscious place in recovery position and seek medical advice. Harmful if swallowed. May cause damage to organs.

Self-protection of the first aider:

First aider: Pay attention to self-protection! Use personal protection equipment. No direct artificial respiration to be given by first aider.

4.2. Most important symptoms and effects, both acute and delayed

Reference to other sections:
SECTION 2: Hazards identification
SECTION 11: Toxicological information

4.3. Indication of any immediate medical attention and special treatment needed

Observe risk of aspiration if vomiting occurs. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

alcohol resistant foam
Carbon dioxide (CO₂)
Extinguishing powder
Use water spray jet to protect personnel and to cool endangered containers.

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, toxic. The product itself does not burn.

Hazardous combustion products:

Nitrogen oxides (NO_x) Carbon monoxide Carbon dioxide (CO₂)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

5.4. Additional information

Co-ordinate fire-fighting measures to the fire surroundings. 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

6.1.1. For non-emergency personnel

Personal precautions:

Use personal protection equipment. Special danger of slipping by leaking/spilling product. Do not breathe vapour. Remove all sources of ignition.

6.1.2. For emergency responders

Personal protection equipment:

Use appropriate respiratory protection.

6.2. Environmental precautions

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Immediately inform the responsible authorities in entry into waterways or sewage system.

6.3. Methods and material for containment and cleaning up

For containment:

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Other information:

Treat the recovered material as prescribed in the section on waste disposal.



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

6.4. Reference to other sections

SECTION 7: Handling and storage
 SECTION 8: Exposure controls/personal protection
 SECTION 13: Disposal considerations

6.5. Additional information

Clear spills immediately.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Harmful if swallowed. Do not breathe gas/vapour. Keep out of reach of children. Wash hands before breaks and after work. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Provide adequate ventilation. Vapours are heavier than air.

Fire prevent measures:

No special fire protection measures are necessary.

Measures to prevent aerosol and dust generation:

Provide adequate ventilation.

Environmental precautions:

See section 8.

Advices on general occupational hygiene

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing.

* 7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep locked up and out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Requirements for storage rooms and vessels:

Keep/Store only in original container. Shafts and sewers must be protected from entry of the product.

Hints on storage assembly:

Do not store together with: Food and feedingstuffs

Storage class: 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

* 7.3. Specific end use(s)

Recommendation:

Observe technical data sheet.

Antifreeze / Coolant

SECTION 8: Exposure controls/personal protection

* 8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	ethane-1,2-diol CAS No.: 107-21-1	① 10 ppm (26 mg/m ³) ② 20 ppm (52 mg/m ³) ⑤ (kann über die Haut aufgenommen werden)
IOELV (EU)	ethane-1,2-diol CAS No.: 107-21-1	① 20 ppm (52 mg/m ³) ② 40 ppm (104 mg/m ³)
TRGS 900 (DE)	2,2'-oxydiethanol CAS No.: 111-46-6	① 10 ppm (44 mg/m ³) ② 40 ppm (176 mg/m ³)



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
ethane-1,2-diol CAS No.: 107-21-1	35 mg/m ³	① DNEL worker ② DNEL acute inhalative (local)
potassium 2-ethylhexanoate CAS No.: 3164-85-0	41.98 mg/m ³	① DNEL worker ② DNEL long-term inhalative (systemic)

* 8.2. Exposure controls

8.2.1. Appropriate engineering controls

See section 7. No additional measures necessary.

8.2.2. Personal protection equipment

Eye/face protection:

During transfer: Eye glasses with side protection

Skin protection:

Hand protection

Suitable material: NBR (Nitrile rubber), PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber)

Thickness of the glove material: $\geq 0,3$ mm

Breakthrough time (maximum wearing time) 480 min

Breakthrough times and swelling properties of the material must be taken into consideration.

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.

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.

Tested protective gloves must be worn: EN ISO 374

Suitable protective clothing: Protective clothing

Respiratory protection:

Usually no personal respiratory protection necessary.

Thermal hazards:

No data available.

Other protection measures:

Wash hands before breaks and after work.

8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

8.3. Additional information

No data available

SECTION 9: Physical and chemical properties

* 9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: violet

Odour: not determined

Safety relevant basis data

parameter		at °C	Method	Remark
pH	7.5 - 8.5	20 °C		
Melting point	<i>not determined</i>			
Freezing point	< -40 °C			
Initial boiling point and boiling range	<i>not determined</i>			
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	<i>not determined</i>			
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	<i>not determined</i>			



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

parameter		at °C	Method	Remark
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Relative density	1,070 kg/m ³	20 °C		
Bulk density	<i>not determined</i>			
Water solubility	completely miscible			
Partition coefficient: n-octanol/ water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>			

9.2. Other information

No data available

SECTION 10: Stability and reactivity

* 10.1. Reactivity

No known hazardous reactions. hygroscopic.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

responds with: Oxidising agent, strong, Strong acid

10.4. Conditions to avoid

To avoid thermal decomposition do not overheat.

10.5. Incompatible materials

Oxidising agent, strong
 Acid, concentrated

10.6. Hazardous decomposition products

The product is stable under storage at normal ambient temperatures.

SECTION 11: Toxicological information

* 11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
107-21-1	ethane-1,2-diol	LD₅₀ oral: 4,700 mg/kg (rat) LD₅₀ dermal: 10,600 mg/kg (canin)
3164-85-0	potassium 2-ethylhexanoate	LD₅₀ oral: 2,043 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rat)

Acute oral toxicity:

There are no data available on the preparation/mixture itself.

Acute dermal toxicity:

No information available for acute dermal and inhalative toxicity.

Acute inhalation toxicity:

No information available for acute dermal and inhalative toxicity.

Skin corrosion/irritation:

No irritant effect. Frequently or prolonged contact with skin may cause dermal irritation.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

No sensitizing effects known.

Germ cell mutagenicity:

No indications of human germ cell mutagenicity exist.

Carcinogenicity:

No indication of human carcinogenicity.



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

Reproductive toxicity:

No indications of human reproductive toxicity exist.

STOT-repeated exposure:

May cause damage to kidneys through prolonged or repeated exposure if swallowed.

Aspiration hazard:

Observe risk of aspiration if vomiting occurs.

Additional information:

Data apply to the main component.
ethanediol

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
107-21-1	ethane-1,2-diol	LC₅₀ : 8,050 – 72,900 mg/l 4 d EC₅₀ : >100 mg/l 2 d ErC₅₀ : 6,500 – 13,000 mg/l 4 d NOEC : 72,860 mg/l -∞ h NOEC : 8,590 mg/l -∞ h
3164-85-0	potassium 2-ethylhexanoate	LC₅₀ : >100 mg/l 4 d (Oryzias latipes (Ricefish)) EC₅₀ : 106 mg/l 2 d (Daphnia magna (Big water flea)) EC₅₀ : 49.3 mg/l 3 d (Desmodesmus subspicatus)

Assessment/classification:

The product has not been tested.

* **12.2. Persistence and degradability**

CAS No.	Substance name	Biodegradation	Remark
107-21-1	ethane-1,2-diol	Yes, rapidly	
3164-85-0	potassium 2-ethylhexanoate	Yes, rapidly	

Biodegradation:

Readily biodegradable (according to OECD criteria). The information about ecology refers to the main components.

Additional information:

The product has not been tested.

* **12.3. Bioaccumulative potential**

CAS No.	Substance name	Log K _{OC}	Bioconcentration factor (BCF)
107-21-1	ethane-1,2-diol	-1.93	
3164-85-0	potassium 2-ethylhexanoate	2.96	

Bioconcentration factor (BCF):

The information relates to the active ingredient.

12.4. Mobility in soil

No data available

* **12.5. Results of PBT and vPvB assessment**

CAS No.	Substance name	Results of PBT and vPvB assessment
107-21-1	ethane-1,2-diol	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.
111-46-6	2,2'-oxydiethanol	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.
3164-85-0	potassium 2-ethylhexanoate	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

SECTION 13: Disposal considerations

- * **13.1. Waste treatment methods**
Dispose of waste according to applicable legislation.
- 13.1.1. Product/Packaging disposal**
Waste codes/waste designations according to EWC/AVV
- Waste code packaging:**
- Remark:**
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
- Waste treatment options**
- Appropriate disposal / Product:**
Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.
- Appropriate disposal / Package:**
Non-contaminated packages may be recycled.
- * **13.2. Additional information**
No data available

SECTION 14: Transport information


No dangerous good in sense of these transport regulations.

14.1. UN-No.
not relevant
14.2. UN proper shipping name
not relevant
14.3. Transport hazard class(es)
not relevant
14.4. Packing group
not relevant
14.5. Environmental hazards
not relevant
14.6. Special precautions for user
not relevant

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

Additional information:
No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

- * **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.1.1. EU legislation**
- Other regulations (EU):**
Use restriction according to REACH annex XVII, no.:
ethanediol
- 15.1.2. National regulations**
-  **[DE] National regulations**
- Restrictions of occupation**
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

Water hazard class (WGK)

WGK:

1 - schwach wassergefährdend

Source:

Self-classification (mixture; calculation rule).

Technische Regeln für Gefahrstoffe

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Berufsgenossenschaftliche Vorschriften (BGV)

Berufsgenossenschaftliche Informationen (BGI) 868
Berufsgenossenschaftliche Regeln (BGR) 189, 190, 192, 195

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

15.3. Additional information

No data available

SECTION 16: Other information

* 16.1. Indication of changes

1.4.	Emergency telephone number
2.2.	Label elements
3.2.	Mixtures
4.1.	Description of first aid measures
6.1.	Personal precautions, protective equipment and emergency procedures
7.2.	Conditions for safe storage, including any incompatibilities
7.3.	Specific end use(s)
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
10.1.	Reactivity
11.1.	Information on toxicological effects
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
13.1.	Waste treatment methods
13.2.	Additional information
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes

16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

16.3. Key literature references and sources for data

67/548/EEC - Dangerous Substances Directive

1999/45/EEC - Dangerous Preparations Directive

EC 1907/2006 - REACH Regulation

1272/2008 EC - Regulation on classification, labeling and packaging of substances and mixtures, and amending Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1907/2006

Regulation (EC) No 1907/2006 (REACH), Annex II

European Chemicals Agency (ECHA), C & L classification and labeling inventory

European Chemicals Agency (ECHA), ECHA CHEM Registered substances

OECD The Global Portal to Information on Chemical Substances (ChemPortal)

Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA): GESTIS substance database and International limit values for chemical substances

Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances hazardous to water Rigoletto (catalog substances hazardous to water)



Revision date: 21-Aug-2018 Version: 4 Print date: 21-Aug-2018

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-repeated exposure (<i>STOT RE 2</i>)	H373: May cause damage to organs through prolonged or repeated exposure. (...)	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure. (...)

16.6. Training advice

No data available

16.7. Additional information

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.

* Data changed compared with the previous version