RAVENOL Kettenoel Off Road Spray

ART.-NR. 1360303

400 ml | 1360303-400

RAVENOL Kettenöl Off Road Spray ist ein Kettenfett, speziell entwickelt für die Kettenschmierung unter extremen Beanspruchungen von Geländemotorrädern und Quads.

RAVENOL Kettenöl Off Road Spray ist ideal für Ketten mit oder ohne Ringabdichtung geeignet. Und wird für O- und X-ring Ketten empfohlen.

RAVENOL Kettenöl Off Road Spray hat optimale Einsatzmöglichkeit im Geländebereich, da Schmutz aufgrund der verminderten Haftung leicht abgeschleudert wird.

RAVENOL Kettenöl Off Road Spray ist wasserabweisend und hat einen wirksamer Schutz vor Verschleiß und Korrosion.

RAVENOL Kettenöl Off Road Spray sorgt durch einen hoher PTFE-Feststoffanteil für eine fettfreie Versiegelung der gesamten Oberfläche.

Anwendungshinweis

Handhabung: Vor Gebrauch gut schütteln. Oberflächen sollen trocken, staub- und fettfrei sein.

RAVENOL Kettenöl Off Road Spray dünn auftragen. Nach ca. 2 Minuten nochmals dünn besprühen.

Vor Belastung sehr gut abtrocknen lassen.

Eigenschaften

RAVENOL Kettenöl Off Road Spray bietet:

- Hervorragende Haftfähigkeit, kein Abtropfen und Abschleudern
- Sparsam im Verbrauch
- Wachsartig trocknender Film, daher kein Anhaften von Schmutz
- Wasser abstoßend, extremer Schutz gegen Korrosion
- Ausgezeichnete Dämpfungseigenschaften
- Ausgezeichnetes Kriech- und Eindringvermögen
- Sehr Alterungsstabil, auch gegenüber aggressiven Medien
- Niedrige Reibwerte, geringer Verschleiß
- Extrem UV-beständig.

Eigenschaften	Einheit	Daten	Prüfung nach

Alle Angaben entsprechen nach bestem Wissen dem derzeitigen Stand der Erkenntisse 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: 06. Mai 2020

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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 Kettenoel Off Road Spray

Article No.:
1360303

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

Use of the substance/mixture:
Technical Spray

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 48
E-mail: kontakt@ravenol.de
Website: www.ravenol.de
E-mail (competent person): kontakt@ravenol.de

1.4. Emergency telephone number

Abt. 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 (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
Aerosols *(Flam. Aerosol 1)*	H222: Extremely flammable aerosol.	
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Respiratory or skin sensitisation *(Skin Sens. 1)*	H317: May cause an allergic skin reaction.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:

GHS02
Flame

GHS07
Exclamation mark

GHS09
Environment

Signal word: Danger

Hazard components for labelling:
n-hexane; Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane ; Hydrocarbons, C7, n-alkanes, Isoalkanes, cyclenes; cyclohexane

hazard statements for physical hazards	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

hazard statements for health hazards	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

hazard statements for environmental hazards	
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.

Precautionary statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of water/soap.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor/Emergency telephone number/ if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statements Storage	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary statements Disposal	
P501	Dispose of contents/container to according to official regulations for disposal.

Additional information:
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

2.3. Other hazards

Adverse physicochemical effects:
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

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 [CLP]**	**Concen-tration**
CAS No.: 64742-49-0 **EC No.:** 921-024-6 **REACH No.:** 01-2119475514-35-0000	**Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane** STOT SE 3, Flam. Liq. 2, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2  **Danger** H225-H304-H315-H336-H411	20 – < 25 Vol-%
EC No.: 927-510-4 **REACH No.:** 01-2119475515-33-0000	**Hydrocarbons, C7, n-alkanes, Isoalkanes, cyclenes** STOT SE 3, Flam. Liq. 2, Skin Irrit. 2, Asp. Tox. 1, Aquatic Chronic 2  **Danger** H225-H304-H315-H336-H411	20 – < 25 Vol-%
CAS No.: 110-54-3 **EC No.:** 203-777-6 **REACH No.:** 01-0000601037-00-0000	**n-hexane** Repr. 2, STOT SE 3, Flam. Liq. 2, Skin Irrit. 2, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2  **Danger** H225-H304-H315-H336-H361f-H373-H411	0.1 – < 1 Vol-%

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 70024-69-0 **EC No.:** 274-263-7	**Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts** Skin Sens. 1 **Warning** H317	0.1 – < 1 Vol-%
CAS No.: 110-82-7 **EC No.:** 203-806-2	**cyclohexane** STOT SE 3, Flam. Liq. 2, Skin Irrit. 2, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1 **Danger** H225-H304-H315-H336-H410	< 0.1 Vol-%

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
Never give anything by mouth to an unconscious person or a person with cramps. Remove persons to safety.

Following inhalation:
Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

In case of skin contact:
After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water.
Take off contaminated clothing and wash it before reuse.
Medical treatment necessary.

After eye contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion:
Rinse mouth immediately and drink plenty of water. Observe risk of aspiration if vomiting occurs.

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

The following symptoms may occur: Headache, Dizziness, Nausea, Drowsiness

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Carbon dioxide (CO2)
Extinguishing powder
Foam

Unsuitable extinguishing media:
High power water jet

5.2. Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air.
Flammable

Hazardous combustion products:
Nitrogen oxides (NOx)
Carbon monoxide
Carbon dioxide (CO2)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

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. Suppress gases/vapours/mists with water spray jet. 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. Remove all sources of ignition.Provide adequate ventilation.Do not breathe gas/fumes/vapour/spray.Do not breathe gas/vapour. Avoid contact with skin, eyes and clothes.

6.1.2. For emergency responders

Personal protection equipment:

Use appropriate respiratory protection.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

6.5. Additional information

No data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Pressurised container: May burst if heated. Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. Do not breathe gas/vapour/aerosol.

Fire prevent measures:

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

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.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on storage assembly:

Do not store together with:
Material, oxygen-rich, oxidizing
Pyrophoric or self-heating substances

Storage class: 2 B – aerosols

7.3. Specific end use(s)

Recommendation:

Observe technical data sheet.

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)	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0	① 1,500 mg/m³ ② 3,000 mg/m³ ⑤ (C5-C8 Aliphaten)
TRGS 900 (DE)	propane CAS No.: 74-98-6	① 1,000 ppm (1,800 mg/m³) ② 4,000 ppm (7,200 mg/m³)
TRGS 900 (DE)	butane CAS No.: 106-97-8	① 1,000 ppm (2,400 mg/m³) ② 4,000 ppm (9,600 mg/m³)
TRGS 900 (DE)	isobutane CAS No.: 75-28-5	① 1,000 ppm (2,400 mg/m³) ② 4,000 ppm (9,600 mg/m³)
TRGS 900 (DE)	n-hexane CAS No.: 110-54-3	① 50 ppm (180 mg/m³) ② 400 ppm (1,440 mg/m³)
IOELV (EU)	n-hexane CAS No.: 110-54-3	① 20 ppm (72 mg/m³)
TRGS 900 (DE)	cyclohexane CAS No.: 110-82-7	① 200 ppm (700 mg/m³) ② 800 ppm (2,800 mg/m³)
IOELV (EU)	cyclohexane CAS No.: 110-82-7	① 200 ppm (700 mg/m³)

8.1.2. biological limit values

Limit value type (country of origin)	Substance name	Limit value	① parameter ② Test material ③ Sample time ④ Remark
TRGS 903 (DE)	n-hexane CAS No.: 110-54-3	5 mg/L	① 2,5-Hexandion + 4,5-Dihydroxy-2-hexanon, Nach Hydrolyse: ② Urin ③ Expositionsende bzw. Schichtende
TRGS 903 (DE)	cyclohexane CAS No.: 110-82-7	150 mg/g Creatinin	① 1,2-Cyclohexandiol, Nach Hydrolyse: ② Urin ③ bei Langzeitexposition, Expositionsende bzw. Schichtende

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. Do not breathe gas/vapour/aerosol.

8.2.2. Personal protection equipment

Eye/face protection:

Wear eye/face protection.

Skin protection:
Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.
Tested protective gloves must be worn: DIN EN 374
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.
Suitable material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)
Breakthrough time (maximum wearing time) 480 min
Thickness of the glove material > 0,35 mm

Body protection: Not readily flammable
Wear anti-static footwear and clothing

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

Other protection measures:
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

8.2.3. Environmental exposure controls
No data available

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: Aerosol **Colour:** beige
Odour: characteristic

Safety relevant basis data

parameter		at °C	method	Remark
pH	*not determined*			
Melting point/freezing point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	-40 °C			
Decomposition temperature (°C):	*not determined*			
Flash point	-80 °C			
Evaporation rate	*not determined*			
Ignition temperature in °C	*not determined*			
Upper/lower flammability or explosive limits	1 – 11 Vol-%			
Vapour pressure	*not determined*			
Vapour density	*not determined*			
Density	0.715 g/cm³			
Bulk density	*not determined*			
Water solubility (g/L)	insoluble			
Partition coefficient: n-octanol/ water	*not determined*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	*not determined*	40 °C		

9.2. Other information
Density: The information relates to the active ingredient.

SECTION 10: Stability and reactivity

10.1. Reactivity
Ignition hazard
Flammable

10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions
Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5. Incompatible materials
No information available.

10.6. Hazardous decomposition products
No known hazardous decomposition products.

Additional information
Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane	**LD_{50} oral:** >5,000 mg/kg (Rat) **LD_{50} dermal:** >2,000 mg/kg (Rabbit) **LC_{50} inhalative:** >23.3 mg/l 4 h (Rat)
	Hydrocarbons, C7, n-alkanes, Isoalkanes, cyclenes	**LD_{50} oral:** 5,500 mg/kg (Rat) **LD_{50} dermal:** 2,770 mg/kg (Rat) **LC_{50} inhalative:** 23.3 mg/l (Rat)
110-54-3	n-hexane	**LD_{50} oral:** 25,000 g/m³ (Ratte) **LD_{50} dermal:** 2,000 g/m³ (Ratte) **LC_{50} inhalative:** 169 mg/l 4 h (Ratte)

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

Skin corrosion/irritation:
Causes skin irritation.

Respiratory or skin sensitisation:
May cause an allergic skin reaction. (Benzenesulfonic acid, mono-C16-24-alkyl derivats, calcium salts)

Germ cell mutagenicity:
No indications of human germ cell mutagenicity exist.

Carcinogenicity:
No indication of human carcinogenicity.

STOT-single exposure:
May cause drowsiness or dizziness.
(hydrocarbons, C6-C7, n-alkanes, isoalkanes cyclenes, <5% n-hexane), (hydrocarbons, C7, n-alkanes, isoalkanes cyclenes(, (n-hexane), (CYCLOHEXANE)

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane	**LC_{50}:** 1 – 10 mg/l 4 d (Pimephales promelas (fathead minnow)) **ErC_{50}:** >10 – 100 mg/l 3 d (Pseudokirchneriella subcapitata) **EC_{50}:** >1 – 10 mg/l 2 d (Daphnia magna (Big water flea))
	Hydrocarbons, C7, n-alkanes, Isoalkanes, cyclenes	**LC_{50}:** 10 mg/l 4 d **ErC_{50}:** 100 mg/l 3 d **EC_{50}:** 10 mg/l 2 d
110-54-3	n-hexane	**LC_{50}:** 2.5 mg/l 4 d (Pimephales prometas) **ErC_{50}:** 9.285 mg/l 3 d (Pseudokirchneriella subcapitata) **EC_{50}:** 21.85 mg/l 2 d (Daphnia magna)

Aquatic toxicity:
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Abiotic degradation:
The product has not been tested.

12.3. Bioaccumulative potential

CAS No.	Substance name	Log K_{OC}	Bioconcentration factor (BCF)
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane	5.2	

Bioconcentration factor (BCF):
There are no data available on the mixture itself.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclics, <5% n-hexane	—
	Hydrocarbons, C7, n-alkanes, Isoalkanes, cyclenes	—
110-54-3	n-hexane	—
70024-69-0	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	—

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Other adverse effects

No information available. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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:

15 01 04	Metallic packaging

Waste treatment options

Appropriate disposal / Product:
Dispose of waste according to applicable legislation.

Appropriate disposal / Package:
Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

13.2. Additional information
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN-No.			
1950	1950	1950	1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
14.3. Transport hazard class(es)			
 2.1	 2.1	 2.1	 2.1
14.4. Packing group			
not determined	not determined	not determined	not determined
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special provisions: 190 327 344 625 **Limited quantity (LQ):** 1 L **Hazard identification number (Kemler No.):** **Classification code:** F **tunnel restriction code:** D **Remark:**	**Special provisions:** 190 327 344 625 **Limited quantity (LQ):** 1 L **Classification code:** F **Remark:**	**Special provisions:** **Limited quantity (LQ):** 1L **EmS-No.:** F-D; S-U **Remark:** MP: Hydrocarbons, C6-C7; Hydrocarbons C6	**Special provisions:** **Limited quantity (LQ):** **Remark:**

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

SECTION 15: Regulatory information

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

15.1.1. EU legislation
Authorisations:
Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).: No information available.

94/69 / EC (21 ATP). Benzene content is less than 0.1%. It is the annotation P.
Classification and labeling as carcinogenic is not necessary.

15.1.2. National regulations

[DE] National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (WGK)

WGK:

1 - schwach wassergefährdend

Description:

slightly hazardous to water (WGK 1)

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

sections 2, 3, 5, 9

16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu

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)

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
Aerosols *(Flam. Aerosol 1)*	H222: Extremely flammable aerosol.	
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	
Respiratory or skin sensitisation *(Skin Sens. 1)*	H317: May cause an allergic skin reaction.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

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

Hazard statements	
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility. (...)

Hazard statements	
H373	May cause 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.

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.