RENOLIT EXOFOL Professional Corner Pen

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law
Issue date: 22/06/2023 Revision date: 22/06/2023 Supersedes version of: 23/11/2022 Version: 4.00

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

1.1. Product identifier

Product form : Mixture
Trade name : RENOLIT EXOFOL Professional Corner Pen
UFI : JKE0-40VA-2003-CM3N

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Surface treatment

1.2.2. Uses advised against

Restrictions on use : For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier
RENOLIT SE
Horchheimer Strasse 50
67547 Worms
Germany
T +49 6241 94031-13 - F +49 6241 94031-60
folienservice@renolit.com - www.renolit.com/exteriorsolutions

Email competent person
sds@kft.de

1.4. Emergency telephone number

Emergency number : National Health Service (NHS)
24 hour national number consumer
England and Scotland: 111
Wales: 0845 46 47
Northern Ireland: call your local General Practitioner

Call 999 if there is a life-threatening incident.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2	H225
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Danger
Contains : 1-ethoxypropan-2-ol; 1-methoxy-2-propanol

Hazard statements (CLP)	:	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing spray, vapours, gas, mist. P273 - Avoid release to the environment. P280 - Wear eye protection, protective gloves, protective clothing. P312 - Call a POISON CENTER, doctor if you feel unwell. P337+P313 - If eye irritation persists: Get medical advice/attention.
EUH-statements	:	EUH066 - Repeated exposure may cause skin dryness or cracking.
Extra phrases	:	For professional users only.

2.3. Other hazards

Other hazards which do not result in classification : Repeated dermal contact with material can lead to defatting of the skin.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-ethoxypropan-2-ol (1569-02-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-methoxy-2-propanol (107-98-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-) (117527-94-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1) (85455-32-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol substance with national workplace exposure limit(s) (GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5	70 – 90	Flam. Liq. 2, H225 Eye Irrit. 2, H319
1-ethoxypropan-2-ol	CAS-No.: 1569-02-4 EC-No.: 216-374-5 EC Index-No.: 603-177-00-8	10 – 25	Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H336
1-methoxy-2-propanol substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 107-98-2 EC-No.: 203-539-1 EC Index-No.: 603-064-00-3	< 5	Flam. Liq. 3, H226 STOT SE 3, H336
reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-)	CAS-No.: 117527-94-3 EC-No.: 403-720-7 EC Index-No.: 611-044-00-0	< 2.5	Aquatic Chronic 2, H411
Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1)	CAS-No.: 85455-32-9 EC-No.: 287-267-9	< 2.5	Self-heat. 2, H252 Aquatic Chronic 2, H411

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Ethanol	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5	(50 ≤C < 100) Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact	:	Rinse skin with water/shower. Take off immediately all contaminated clothing.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	:	May cause drowsiness or dizziness. Headache.
Symptoms/effects after skin contact	:	Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	:	Eye irritation.

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	:	Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Carbon dioxide. Alcohol-resistant foam. Foam.
Unsuitable extinguishing media	:	Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Highly flammable liquid and vapour.
Explosion hazard	:	Explosive vapour/air mixtures may be formed.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions	:	Protect container with water spray.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	:	Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	:	Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing gas, mist, vapours, spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Take up liquid spill into absorbent material. Cover spill with non combustible material, e.g.: sand/earth. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Notify authorities if product enters sewers or public waters.
Other information	:	Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Vapours may form explosive mixture with air.
Precautions for safe handling	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing gas, mist, vapours, spray. Avoid contact with skin and eyes.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Ground/bond container and receiving equipment.
Storage conditions	:	Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Heat and ignition sources	:	Keep away from heat and direct sunlight. Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Information about storage in one common storage facility	:	Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Ethanol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m³
WEL TWA (OEL TWA) [2]	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

1-methoxy-2-propanol (107-98-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	1-Methoxypropanol-2
IOEL TWA	375 mg/m³
IOEL TWA [ppm]	100 ppm
IOEL STEL	568 mg/m³
IOEL STEL [ppm]	150 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	1-Methoxypropan-2-ol
WEL TWA (OEL TWA) [1]	375 mg/m³
WEL TWA (OEL TWA) [2]	100 ppm

WEL STEL (OEL STEL)	560 mg/m³
WEL STEL (OEL STEL) [ppm]	150 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Ethanol (64-17-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	8238 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	380 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	114 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.63 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.38 kg/kg food
PNEC (STP)	
PNEC sewage treatment plant	580 mg/l

1-ethoxypropan-2-ol (1569-02-4)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	500 mg/m³
Long-term - systemic effects, dermal	74 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	106 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	300 mg/m³
Long-term - systemic effects,oral	14 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	127 mg/m³
Long-term - systemic effects, dermal	44.3 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l

PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	19 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	37.6 mg/kg dwt
PNEC sediment (marine water)	3.76 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.97 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	142 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	1250 mg/l

1-methoxy-2-propanol (107-98-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	553.5 mg/m³
Long-term - systemic effects, dermal	183 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	369 mg/m³
Long-term - local effects, inhalation	553.5 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	33 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	43.9 mg/m³
Long-term - systemic effects, dermal	78 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	100 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	52.3 mg/kg dwt
PNEC sediment (marine water)	5.2 mg/kg dwt
PNEC (Soil)	
PNEC soil	4.59 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-) (117527-94-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	1.18 mg/m³

DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.08 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.54 mg/kg dwt
PNEC sediment (marine water)	0.054 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.049 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station. Provide local exhaust or general room ventilation.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Use splash goggles when eye contact due to splashing is possible

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. EN 340. EN 13034. Flame retardant antistatic protective clothing. EN ISO 13688

Hand protection:
In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves. ISO 374-1. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. EN 143. Short term exposure. Breathing apparatus with filter. A-P2. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Take off immediately all contaminated clothing. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product. Apply emollient cream.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Various colours.
Odour	:	Solvent.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	78 °C
Flammability	:	Not applicable
Explosive properties	:	In use, may form flammable/explosive vapour-air mixture. Product is not explosive. Explosive vapour/air mixtures may be formed.
Oxidising properties	:	Non oxidizing.
Explosive limits	:	Not available
Lower explosion limit	:	1.3 vol %
Upper explosion limit	:	15 vol %
Flash point	:	13 °C
Auto-ignition temperature	:	255 °C
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Water: Partially soluble Ether: <
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable
Vapour pressure	:	59 hPa
Vapour pressure at 50°C	:	Not available
Density	:	1 g/cm³ (20 °C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content	:	75.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	Prolonged or repeated contact may cause dermatitis by loss of natural skin fats
Serious eye damage/irritation	:	Causes serious eye irritation.
Respiratory or skin sensitisation	:	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	:	May cause drowsiness or dizziness.

1-ethoxypropan-2-ol (1569-02-4)	
STOT-single exposure	May cause drowsiness or dizziness.

1-methoxy-2-propanol (107-98-2)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic)	:	Harmful to aquatic life with long lasting effects. (Based on available data, the classification criteria are not met)

reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-) (117527-94-3)	
LC50 - Fish [1]	> 100 mg/l (96h; Danio rerio; OECD 203)

Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1) (85455-32-9)	
EC50 - Crustacea [1]	7.72 mg/l (48 h; Daphnia magna; (OECD 202 method))
ErC50 algae	1.32 mg/l (72 h; Lemna gibba; (OECD 221 method))
NOEC chronic algae	0.1 mg/l (72 h; Lemna gibba; (OECD 221 method))

12.2. Persistence and degradability

RENOLIT EXOFOL Professional Corner Pen	
Persistence and degradability	The product has not been tested.
Ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable.
Biodegradation	84 % (20 d)
1-ethoxypropan-2-ol (1569-02-4)	
Persistence and degradability	Readily biodegradable.
Biodegradation	68 % (28d; (OECD 301D method))
1-methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % (28 d; (OECD 301E method))
Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1) (85455-32-9)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	11 % (28 d; (OECD 301F method))

12.3. Bioaccumulative potential

RENOLIT EXOFOL Professional Corner Pen	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Bioaccumulative potential	The product has not been tested.
Ethanol (64-17-5)	
Partition coefficient n-octanol/water (Log Kow)	-0.35 (20 °C)
Bioaccumulative potential	Bioaccumulation unlikely.
1-ethoxypropan-2-ol (1569-02-4)	
Partition coefficient n-octanol/water (Log Pow)	0 (pH 7; 20°C; Read-across)
Partition coefficient n-octanol/water (Log Kow)	≤ 3
Bioaccumulative potential	There is no bioaccumulation.
1-methoxy-2-propanol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	< 1 (20 °C; pH 6.8; (OECD 117 method))
Bioaccumulative potential	Bioaccumulation unlikely.
Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1) (85455-32-9)	
Partition coefficient n-octanol/water (Log Pow)	1.6 (23 °C; pH 7; Calculation method)

12.4. Mobility in soil

RENOLIT EXOFOL Professional Corner Pen	
Ecology - soil	The product has not been tested.
Ethanol (64-17-5)	
Surface tension	22.31 mN/m (20 °C)

1-ethoxypropan-2-ol (1569-02-4)	
Ecology - soil	Product adsorbs little onto the soil.

1-methoxy-2-propanol (107-98-2)	
Surface tension	70.7 mN/m (20 °C; 1 g/L; (OECD 115 method))

12.5. Results of PBT and vPvB assessment

RENOLIT EXOFOL Professional Corner Pen
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Component	
Ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-ethoxypropan-2-ol (1569-02-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
1-methoxy-2-propanol (107-98-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-) (117527-94-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Hydrogenhydroxy [2-hydroxy-3 - [(2-hydroxy-3-nitrobenzylidene) amino] -5-nitrobenzenesulfonato (3 -)] chromate (1-), compound with 3 - [(2-ethylhexyl) oxy] propylamine (1 :1) (85455-32-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Disposal must be done according to official regulations. Do not dispose of with domestic waste. Do not discharge into drains or the environment.

Product/Packaging disposal recommendations : Recycle or dispose of in compliance with current legislation.

Additional information : Flammable vapours may accumulate in the container.

European List of Waste (LoW) code : 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances
08 01 12 - waste paint and varnish other than those mentioned in 08 01 11
08 01 13* - sludges from paint or varnish containing organic solvents or other dangerous substances
08 01 15* - aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances
20 01 27* - paint, inks, adhesives and resins containing dangerous substances

HP Code : HP3 - “Flammable:”
– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;
– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;
– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;
– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
HP5 - “Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:” waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
HP4 - “Irritant – skin irritation and eye damage:” waste which on application can cause skin irritation or damage to the eye.
HP14 - “Ecotoxic:” waste which presents or may present immediate or delayed risks for one or more sectors of the environment

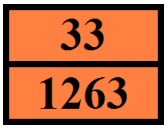
SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1263	UN 1263	UN 1263	UN 1263	UN 1263
14.2. UN proper shipping name				
PAINT	PAINT	Paint	PAINT	PAINT
Transport document description				
UN 1263 PAINT, 3, II, (D/E)	UN 1263 PAINT, 3, II	UN 1263 Paint, 3, II	UN 1263 PAINT, 3, II	UN 1263 PAINT, 3, II
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Special provisions (ADR)	:	163, 367, 640C, 650
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E2
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3YE

Transport by sea

Special provisions (IMDG)	:	163, 367
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E2
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-E

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3, A72, A192

Inland waterway transport

Classification code (ADN)	:	F1
Special provisions (ADN)	:	163, 367, 640C, 650
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E2

Rail transport

Classification code (RID)	:	F1
Special provisions (RID)	:	163, 367, 640C, 650
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E2
Transport category (RID)	:	2
Hazard identification number (RID)	:	33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Other information, restriction and prohibition regulations	:	Take note of Directive 94/33/EC on the protection of young people at work.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3(a)	RENOLIT EXOFOL Professional Corner Pen ; Ethanol ; 1-ethoxypropan-2-ol ; 1-methoxy-2-propanol
3(b)	RENOLIT EXOFOL Professional Corner Pen ; Ethanol ; 1-ethoxypropan-2-ol ; 1-methoxy-2-propanol
3(c)	RENOLIT EXOFOL Professional Corner Pen ; reaction mass of: tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2)]-chromate(1-); tert-alkyl(C12-C14)ammonium bis[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium [[1-[[5-(1,1-dimethylpropyl)-2-hydroxy-3-nitrophenyl]azo]-2-naphthalenolato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]]-chromate(1-); tert-alkyl(C12-C14)ammonium; ((1-(4(or 5)-nitro-2-oxidophenylazo)-2-naphtholato)(1-(3-nitro-2-oxido-5-pentylphenylazo)-2-naphtholato))chromate(1-)
40.	Ethanol ; 1-ethoxypropan-2-ol ; 1-methoxy-2-propanol

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : 75.5 %

Seveso Directive (Disaster Risk Reduction)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	**Upper-tier**
P5b FLAMMABLE LIQUIDS — Flammable liquids Category 2 or 3 where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, or — Other liquids with a flash point ≤ 60 °C where particular processing conditions, such as high pressure or high temperature, may create major-accident hazards	50	200

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

United Kingdom

National regulations : Take note of Directive 94/33/EC on the protection of young people at work.

Other information : This safety data sheet is for informational purposes only and does not comply with national legal requirements without reference to a national distributor. The national distributor is responsible for a legally compliant safety data sheet.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	General revision		SDS EU format according to COMMISSION REGULATION (EU) 2020/878
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	UFI	Added	
2.2	Labelling according to Regulation (EC) No. 1272/2008 [CLP]	Added	
3.2	Composition/information on ingredients	Modified	

Abbreviations and acronyms:	
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

CAS-No.	Chemical Abstract Service number

Data sources : European Chemicals Agency, http://echa.europa.eu/. Information provided by the manufacturer.

Department issuing data specification sheet: : KFT Chemieservice GmbH
Im Leuschnerpark 3
D-64347 Griesheim

Phone: +49 6155-8981-400
Fax: +49 6155 8981-500
SDS Service: +49 6155 8981-522

Contact person : Dr. Andreas Kretzschmar

Other information : This safety data sheet is for informational purposes only and does not comply with national legal requirements without reference to a national distributor. The national distributor is responsible for a legally compliant safety data sheet.

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H252	Self-heating in large quantities; may catch fire.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Self-heat. 2	Self-Heating Substances and Mixtures, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	On basis of test data
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 3	H412	Calculation method

KFT SDS EU 00

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.