

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)  
according to Regulation (EU) No 453/2010

Article No.: 22050000  
Print date: 04.03.2019  
Version: 1.9

LUKAS RETUSCHIERFIRNIS  
Revision date: 13.11.2018  
Issue date: 13.11.2018

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

### 1.1. product identifiers

Article No. (manufacturer/supplier): 22050000  
Identification of the substance or mixture: LUKAS RETUSCHIERFIRNIS  
Retouching Varnish

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

#### Relevant identified uses:

Paints for Arts, Hobby & Craft  
Artists supply and hobby preparations  
Coatings and paints, thinners, paint removers

### 1.3. Details of the supplier of the safety data sheet

#### Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd  
Peacock Lane  
Bracknell, RG12 8SS  
ENGLAND  
Telephone: +44 (0) 1344 461083  
Telefax: +44 (0) 1344 486511

#### Dept. responsible for information:

E-mail: Philip.Gray@daler-rowney.com

### 1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

##### Hazard pictograms



Danger

##### Hazard statements

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.  
H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statements

P102 Keep out of the reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing vapours.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P331 Do NOT induce vomiting.  
P262 Do not get in eyes, on skin, or on clothing.

##### contains:

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

##### Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

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## 2.3. Other hazards

### SECTION 3: Composition / information on ingredients

#### 3.2. Mixtures

##### Product description / chemical characterization

Description Varnish

##### Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
919-857-5	01-2119463258-33	
64742-48-9	Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics	25 - 50
649-327-00-6	Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / STOT SE 3 H336	
918-668-5	01-2119455851-35-xxxx	
649-356-00-4	Hydrocarbons, C9, aromatics STOT SE 3 H335 / STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 / Flam. Liq. 3 H226	12,5 - 20
203-539-1		
107-98-2	1-methoxy-2-propanol	10 - 12,5
603-064-00-3	Flam. Liq. 3 H226 / STOT SE 3 H336	

##### Additional information

Full text of classification: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

##### In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

##### Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

##### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

##### After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

##### Extinguishing media which must not be used for safety reasons:

strong water jet

#### 5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage. Vapours form explosive mixtures with air.

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## 5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations. Vapours form explosive mixtures with air.

### 6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

### 6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

#### Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

#### Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

#### Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

### 7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limit values:

1-methoxy-2-propanol

INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

TWA: 375 mg/m<sup>3</sup>; 100 ppm

STEL: 560 mg/m<sup>3</sup>; 150 ppm

#### Additional information

TWA : long-term occupational exposure limit value

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STEL : short-term occupational exposure limit value  
Ceiling : peak limitation

## DNEL:

1-methoxy-2-propanol  
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2  
DNEL long-term dermal (systemic), Workers: 50.6 mg/kg  
DNEL acute inhalative (local), Workers: 553.5 mg/m<sup>3</sup>  
DNEL long-term inhalative (systemic), Workers: 369 mg/m<sup>3</sup>  
DNEL long-term dermal (systemic), Consumer: 18.1 mg/kg  
DNEL long-term inhalative (systemic), Consumer: 43.9 mg/m<sup>3</sup>

Hydrocarbons, C9, aromatics  
INDEX No. 649-356-00-4 / EC No. 918-668-5  
DNEL long-term dermal (systemic), Workers: 25 mg/kg  
DNEL long-term inhalative (systemic), Workers: 150 mg/m<sup>3</sup>  
DNEL long-term oral (repeated), Consumer: 11 mg/kg  
DNEL long-term dermal (local), Consumer: 11 mg/kg  
DNEL acute inhalative (local), Consumer: 32 mg/m<sup>3</sup>

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics  
INDEX No. 649-327-00-6 / EC No. 919-857-5 / CAS No. 64742-48-9  
DNEL long-term dermal (systemic), Workers: 208 mg/kg bw/day  
DNEL long-term inhalative (systemic), Workers: 871 mg/m<sup>3</sup>  
DNEL long-term oral (repeated), Consumer: 125 mg/kg bw/day  
DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day  
DNEL acute inhalative (systemic), Consumer: 900 mg/m<sup>3</sup>  
DNEL long-term inhalative (systemic), Consumer: 185 mg/m<sup>3</sup>

## PNEC:

1-methoxy-2-propanol  
INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2  
PNEC aquatic, freshwater: 10 mg/l  
PNEC aquatic, marine water: 1 mg/l  
PNEC sediment, freshwater: 41.6 mg/kg  
PNEC sediment, marine water: 4.17 mg/kg  
PNEC sewage treatment plant (STP): 100 mg/l

## 8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

### Occupational exposure controls

#### Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

#### Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)  
Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.  
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374  
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

#### Eye protection

Wear closely fitting protective glasses in case of splashes.

#### Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

#### Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

### Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Appearance:** Liquid  
**Physical state:** Liquid  
**Colour:** clear  
**Odour:** characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point:	41 °C	DIN 53213	
Ignition temperature in °C:	194 °C		
Lower explosion limit:	0,6 Vol-%		
Upper explosion limit:	20,4 Vol-%		
Vapour pressure at 20 °C::	3,42		
Density at 20 °C::	0,91 g/cm <sup>3</sup>		
Water solubility (g/L):	partially soluble		
pH at 20 °C::	-		
Viscosity at 23 °C::	24 s 3 mm	EN ISO 2431	
Solvent separation test (%):	< 3 %		
boiling point in °C at 101,3 kPa	120 °C		

### 9.2. Other information:

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

### 10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions. Vapours form explosive mixtures with air.

### 10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

## SECTION 11: Toxicological information

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

No data on preparation itself available.

### 11.1. Information on toxicological effects

#### Acute toxicity

1-methoxy-2-propanol

oral, LD50, Rat: 4016 mg/kg

dermal, LD50, Rabbit: 2000 mg/kg

Hydrocarbons, C9, aromatics

oral, LD50, Rat: 3592 mg/kg

dermal, LD50, Rat: > 3160 mg/kg

inhalative (vapours), LC50, Rat: > 10.2 mg/l (4 h)

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

oral, LD50, Rat: > 5000 mg/kg

dermal, LD50, Rabbit: > 5000 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: > 5 mg/l (4 h)

#### skin corrosion/irritation; Serious eye damage/eye irritation

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Skin (4 h)

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mild irritant.; Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

## Respiratory or skin sensitisation

Toxicological data are not available.

## Specific target organ toxicity

May cause drowsiness or dizziness.

## Aspiration hazard

May be fatal if swallowed and enters airways.

## Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

## Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

## Remark

There is no information available on the preparation itself .

## SECTION 12: Ecological information

### overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

### 12.1. Toxicity

1-methoxy-2-propanol

Fish toxicity, LC50, *Leuciscus idus* (golden orfe): 6812 mg/l (96 h)

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 23300 mg/l (48 h)

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, fish 1 - 10 mg/l (96 h)

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 3.2 mg/l (48 h)

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): > 100 mg/l (96 h)

Method: OECD 203

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): > 1000 mg/l (48 h)

Method: OECD 202

Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: > 1000 mg/l (72 h)

Method: OECD 201

### Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): 9.2 mg/l (96 h)

Fish toxicity, NOEC, *Oncorhynchus mykiss* (Rainbow trout): 1.23 mg/l (28 D)

Algae toxicity, NOEC, *Daphnia magna* (Big water flea): 2.14 mg/l (21 D)

### 12.2. Persistence and degradability

Hydrocarbons, C9, aromatics

:

Photo-chemical elimination

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

:

Photo-chemical elimination; The substance is not soluble in water.; Readily biodegradable (according to OECD criteria)

### 12.3. Bioaccumulative potential

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1-methoxy-2-propanol

Partition coefficient: n-octanol/water: -0.44

Method: Log KOC

Hydrocarbons, C9, aromatics

Partition coefficient: n-octanol/water: 3.7 - 6.7

## 12.4. Mobility in soil

Toxicological data are not available.

## 12.5. Results of PBT assessment

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

## 12.6. Other adverse effects

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

##### List of proposed waste codes/waste designations in accordance with EWC

080111\* waste paint and varnish containing organic solvents or other dangerous substances

##### packaging

##### Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste. Send to a collecting point for used paints.

### SECTION 14: Transport information

#### 14.1. UN number

UN 1866

#### 14.2. UN proper shipping name

Land transport (ADR/RID):

Resin solution

Sea transport (IMDG):

RESIN SOLUTION

Air transport (ICAO-TI / IATA-DGR):

Resin solution

#### 14.3. Transport hazard class(es)

3

#### 14.4. Packing group

III

#### 14.5. Environmental hazards

Land transport (ADR/RID)

not applicable

Marine pollutant

not applicable

#### 14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

##### Further information

##### Land transport (ADR/RID)

tunnel restriction code

D/E

##### Sea transport (IMDG)

EmS-No.

F-E, S-E

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

### EU legislation

#### Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 716

VOC-value (in g/L) ASTM D 2369: 716

### 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).

#### Other regulations, restrictions and prohibition regulations

## 15.2. Chemical Safety Assessment

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

## SECTION 16: Other information

### Full text of classification in section 3:

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

### Abbreviations and acronyms

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

### Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

## Annex

At present, data / information on exposure scenarios are not available, so that an evaluation of the preparation cannot yet be made.