

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 1 / 9

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

1.1. product identifiers

Article No. (manufacturer/supplier) 639
Trade name/designation SILALIN Leinölfirnis

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

Relevant identified uses:

Coating material to protecting surfaces

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Knuchel Farben AG

Farben + Lacke

Steinackerweg 11

CH-4537 Wiedlisbach

Telephone: +41 (0) 32 636 50 40

Telefax: +41 (0) 32 636 50 45

Department responsible for information:

laboratory Manager

E-mail (competent person)

info@knuchel.ch

1.4. Emergency telephone number

Emergency telephone number 145 (+41 (0)44 251 51 51)

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

STOT-single exposure

May cause drowsiness or dizziness.

Aquatic Chronic 3 / H412

Hazardous to the aquatic environment

Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Warning

Hazard statements

H226

Flammable liquid and vapour.

H336

May cause drowsiness or dizziness.

H412

Harmful 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.

P103

Read carefully and follow all instructions.

P210

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

P240

Ground and bond container and receiving equipment.

P241

Use explosion-proof electrical equipment.

P242

Use non-sparking tools.

P243

Take action to prevent static discharges.

P261

Avoid breathing vapours.

P271

Use only outdoors or in a well-ventilated area.

P273

Avoid release to the environment.

P280

Wear protective gloves and eye/face protection.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304 + P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312

Call a POISON CENTER or doctor/physician if you feel unwell.

P370 + P378

In case of fire: Use extinguishing powder or sand to extinguish.

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

P403 + P235

Store in a well-ventilated place. Keep cool.

P405

Keep locked up.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 2 / 9

P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Supplemental hazard information

not applicable

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description Solvents/Thinner

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

EC No.	REACH No.	weight-%
CAS No.	Designation	
Index No.	classification // Remark	
919-857-5	01-2119463258-33 Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics STOT SE 3 H336 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226	25 - 40
918-668-5	01-2119455851-35 Hydrocarbons, C9, aromatics, <0.1% benzene STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411	5 - 10
202-679-0 98-54-4 604-090-00-8	01-2119489419-21 4-tert-Butylphenol Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Repr. 2 H361 / Aquatic Chronic 1 H410	0.1 - 0.5

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.

Following 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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 4 / 9

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.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. 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: > 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/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

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 section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not applicable
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	150 °C Source: Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Flammability:	Flammable liquid and vapour.
Lower and upper explosion limit:	
Lower explosion limit:	0.8 Vol-%
Upper explosion limit:	7 Vol-% Source: Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Flash point:	40 °C Method: DIN 53213
Auto-ignition temperature:	240 °C Source: Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Decomposition temperature:	not applicable
pH at 20 °C:	not applicable
Cinematic viscosity (40°C):	< 80 mm²/s
Viscosity at 20 °C:	18 - 20 sec DIN 4 mm
Solubility(ies):	
Water solubility at 20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	5 mbar Source: Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds,

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 5 / 9

<2% aromatics

Density and/or relative density:

Density at 20 °C: 0.88 g/cm³

Relative vapour density: not applicable

particle characteristics: not applicable

9.2. **Other information**

Solid content: 61 weight-%

solvent content:

Organic solvents: 38 weight-%

Water: 0 weight-%

SECTION 10: Stability and reactivity

10.1. **Reactivity**

No information available.

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.

10.4. **Conditions to avoid**

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**

not applicable

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

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

Acute toxicity

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

oral, LD50, Rat: > 5000 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: > 5000 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: > 5 mg/L (4 h)

Method: OECD 403

Hydrocarbons, C9, aromatics, <0.1% benzene

oral, LD50, Rat: 3492 mg/kg

dermal, LD50, Rabbit: > 3160 mg/kg

inhalative (vapours), LC50, Rat: 6 mg/m³ 10 (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Skin (4 h)

Repeated exposure may cause skin dryness or cracking.

eyes

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin (4 h)

Method: OECD 404

Not to be classified as skin etching/irritant.

eyes

Method: OECD 405

Not to be classified as severe eye damage or eye irritation.

Respiratory or skin sensitisation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 6 / 9

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Skin:

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

Respiratory system:

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin:

Method: OECD 406

Not to be classified as skin sensitising.

Respiratory system:

No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Lactation

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Germ cell mutagenicity

Not to be classified as germ cell mutagen (mutagen).

Carcinogenicity

There are in vivo studies that indicate positive results of kidney cancer.

Reproductive toxicity

Does not qualify as a carcinogen.

In vitro mutagenicity; Evaluation positive

STOT-single exposure; STOT-repeated exposure

May cause drowsiness or dizziness.

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.; After absorption: cardiovascular disorders, cyanosis, agitation After absorption of large quantities: Drowsiness, CNS disorders Other dangerous properties cannot be excluded.

Specific target organ toxicity (repeated exposure)

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Specific target organ toxicity (single exposure)

May cause respiratory irritation and depression of central nervous system with drowsiness, dizziness, weakness, loss of consciousness, nausea and headache.

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics

Aspiration hazard

Aspiration can lead to pulmonary edema and pneumonia.; May be fatal if swallowed and enters airways.

Hydrocarbons, C9, aromatics, <0.1% benzene

Aspiration hazard

May be fatal if swallowed and enters airways.

Practical experience/human evidence

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.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinöförmis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 7 / 9

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.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Daphnia toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): 0,21 mg/L (28 d)

Hydrocarbons, C9, aromatics, <0.1% benzene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 9,2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna: 1,6 mg/L (48 h)

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 0,02 mg/L (21 d)
Method: OECD 211

12.2. Persistence and degradability

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Biodegradation: Evaluation Not readily biodegradable (according to OECD criteria)

Hydrocarbons, C9, aromatics, <0.1% benzene
Biodegradation: Evaluation Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
Distribution coefficient n-octanol/water (log KOW):
No data available

Hydrocarbons, C9, aromatics, <0.1% benzene
Distribution coefficient n-octanol/water (log KOW): 3,7 - 4,5

12.4. Mobility in soil

Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics
soil:
No data available

Hydrocarbons, C9, aromatics, <0.1% benzene
soil:
No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

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. Dispose of waste according to applicable legislation.

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 8 / 9

080111* Waste paint and varnish containing organic solvents or other dangerous substances
*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint
Sea transport (IMDG): PAINT
Air transport (ICAO-TI / IATA-DGR): Paint

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. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 335

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
919-857-5	Hydrocarbons, C9-C11, n-alkanes, iso-alkanes, cyclic compounds, <2% aromatics	01-2119463258-33
918-668-5	Hydrocarbons, C9, aromatics, <0.1% benzene	01-2119455851-35
202-679-0 98-54-4	4-tert-Butylphenol	01-2119489419-21

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

Article No.: 639
Print date: 27.12.2022
Version: 8.0

SILALIN Leinölfirnis
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 9 / 9

SECTION 16: Other information

Full text of classification in section 3

STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Repr. 2 / H361	Reproductive toxicity	Suspected of damaging fertility.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.

Classification procedure

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

Flam. Liq. 3	Flammable liquids	On basis of test data.
STOT SE 3	STOT-single exposure	Calculation method.
Aquatic Chronic 3	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

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 section 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.