

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

( EN / D )

**Trade name :** Lithofin NanoTOP

**Revision date :** 30.01.2019  
**Print date :** 06.02.2019

**Version (Revision) :** 4.0.2 (4.0.1)

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

**1.1 Product identifier**

Lithofin NanoTOP

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

Mixture Impregnation, contains: organic solvents

**1.3 Supplier (manufacturer/importer/only representative/downstream user/distributor)**

Contact :

**Supplier :** Lithofin AG  
**Street :** Heinrich-Otto-Str. 36  
**Postal code/city :** 73240 Wendlingen  
**Telephone :** +49 (0)7024 9403-0  
**Telefax :** +49 (0)7024 9403-40  
**Contact :** Technical Department  
E-mail: info@lithofin.de

Emergency telephone number:  
+49 (0)7024 9403-0  
(Only available during office hours)

**1.4 Emergency telephone number**

see section 1.3

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

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

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

Flam. Liq. 2 ; H225 - Flammable liquids : Category 2 ; Highly flammable liquid and vapour.

STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.

**Additional information**

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

**Remark**

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

**2.2 Label elements**

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

**Hazard pictograms**



Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

**Signal word**

Danger

**Hazard components for labelling**

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0)

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ETHYL ACETATE ; CAS No. : 141-78-6  
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9)

### Hazard statements

H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

### Precautionary statements

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/....  
P331 Do NOT induce vomiting.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local and national regulations.

### Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

### Other labelling

## 2.3 Other hazards

### Adverse physicochemical effects

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

## 2.4 Additional information

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; REACH registration No. : 01-2119471843-32-xxxx ; EC No. : 927-241-2; CAS No. : (64742-49-0)

Weight fraction :  $\geq 45 - < 50$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT SE 3 ; H336 Aquatic Chronic 3 ; H412

ETHYL ACETATE ; REACH registration No. : 01-2119475103-46-xxxx ; EC No. : 205-500-4; CAS No. : 141-78-6

Weight fraction :  $\geq 10 - < 15$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; REACH registration No. : 01-2119463258-33-xxxx ; EC No. : 919-857-5; CAS No. : (64742-48-9)

Weight fraction :  $\geq 10 - < 15$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT SE 3 ; H336

N-BUTYL ACETATE ; REACH registration No. : 01-2119485493-29-xxxx ; EC No. : 204-658-1; CAS No. : 123-86-4

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

#### Additional information

All ingredients of this mixture are (pre)registered according to REACH regulation. < 0,1% Benzene, REG(EC) No 1272/2008, Annex VI; J, P

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

## SECTION 4: First aid measures

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**4.1 Description of first aid measures**

**General information**

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice. Observe risk of aspiration if vomiting occurs.

**Following inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

**In case of skin contact**

After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Do not wash with: Cleaning agent, acidic Cleaning agent, alkaline Solvents/Thinner

**After eye contact**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

**After ingestion**

Call a physician immediately. Keep at rest. Do NOT induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

**Self-protection of the first aider**

First aider: Pay attention to self-protection!

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

No information available.

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

**Notes for the doctor**

Treat symptomatically.

**Special treatment**

First Aid, decontamination, treatment of symptoms.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Foam Carbon dioxide (CO<sub>2</sub>) BC-powder ABC-powder Water spray

**Unsuitable extinguishing media**

Full water jet Strong water jet

**5.2 Special hazards arising from the substance or mixture**

**Hazardous combustion products**

Carbon monoxide Carbon dioxide (CO<sub>2</sub>) Hydrogen fluoride Fluoropolymers

**5.3 Advice for firefighters**

Use suitable breathing apparatus.

**Special protective equipment for firefighters**

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

**5.4 Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases.

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction.

**6.2 Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

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## 6.3 Methods and material for containment and cleaning up

### For cleaning up

Suitable material for taking up: Universal binder

Clean contaminated articles and floor according to the environmental legislation. Retain contaminated washing water and dispose it. Dispose of waste according to applicable legislation.

## 6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

When using do not eat, drink, smoke, sniff.

#### Protective measures

All work processes must always be designed so that the following is excluded: Inhalation of vapours or spray/mists  
Skin contact Eye contact Wear personal protection equipment (refer to section 8). Always close containers tightly after the removal of product. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

#### Measures to prevent fire

Vapours are heavier than air, spread along floors and form explosive mixtures with air. Keep away from sources of ignition - No smoking. The product is: Combustible

**Fire class :** B

**Shake well before use** nein

#### Advices on general occupational hygiene

P362+P364 - Take off contaminated clothing and wash it before reuse.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep/Store only in original container. The floor should be leak tight, jointless and not absorbent. Ensure adequate ventilation of the storage area.

#### Hints on joint storage

**Storage class (TRGS 510) :** 3

**Protect from frost** nein

**Recommended storage temperature** 5 - 25 °C

#### Further information on storage conditions

Keep locked up and out of reach of children. Keep container tightly closed in a cool, well-ventilated place.

### 7.3 Specific end use(s)

#### Recommendation

Observe technical data sheet. Observe instructions for use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0)

Limit value type (country of origin) : TRGS 900 ( D )

Limit value : 600 mg/m<sup>3</sup>

Version :

ETHYL ACETATE ; CAS No. : 141-78-6

Limit value type (country of origin) : TRGS 900 ( D )

Limit value : 200 ppm / 730 mg/m<sup>3</sup>

Peak limitation : 2(I)

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Remark : Y  
Version : 01.03.2018  
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9)  
Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 600 mg/m<sup>3</sup>  
Version :  
N-BUTYL ACETATE ; CAS No. : 123-86-4  
Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 62 ppm / 300 mg/m<sup>3</sup>  
Peak limitation : 2(I)  
Remark : Y  
Version : 01.03.2018

## 8.2 Exposure controls

### Appropriate engineering controls

Ensure adequate ventilation of the storage area.  
Technical measures and the application of suitable work processes have priority over personal protection equipment.

### Personal protection equipment

#### Eye/face protection

##### Suitable eye protection

Eye glasses with side protection goggles

##### Required properties

DIN EN 166

#### Skin protection

##### Hand protection

**Suitable gloves type :** Gloves with long cuffs

**Suitable material :** Data apply to the main component. FKM (fluoro rubber), 0,7mm, >8h;

**Recommended glove articles :** Manufacturer KCL GmbH/Eichenzell-Germany; Ansell/Yarra City-Australia Or comparable articles from other companies.

**Additional hand protection measures :** Check leak tightness/impermeability prior to use.

**Remark :** Breakthrough times and swelling properties of the material must be taken into consideration. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams are not substitutes for body protection.

##### Body protection

Protective clothing.

**Suitable protective clothing :** Chemical protection clothing Chemical resistant safety shoes

**Required properties :** antistatic.

Protective clothing. : DIN EN ISO 20345 DIN EN 13034 DIN EN 14605

footwear : DIN EN 14404

**Remark :** Barrier creams are not substitutes for body protection.

#### Respiratory protection

Usually no personal respiratory protection necessary. Respiratory protection necessary at: insufficient ventilation aerosol or mist formation. high concentrations spray application

##### Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Half-face mask (DIN EN 140) ABEK-P1

##### Remark

Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

### General health and safety measures

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use. Wash hands before breaks and after work. Apply skin care products after work. Do not breathe gas/fumes/vapour/spray.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** Liquid

**Colour :** colourless

**Odour :** solvent

#### Safety relevant basis data

<b>Melting point/melting range :</b>	( 1013 hPa )	<	-18	°C	
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	approx.	85	°C	
<b>Decomposition temperature :</b>	( 1013 hPa )		not determined		
<b>Flash point :</b>		<	10	°C	closed cup (EN ISO 3679)
<b>Ignition temperature :</b>			not determined		
<b>Sustaining combustion</b>			Yes		UN Test L2:Sustained combustibility test
<b>Lower explosion limit :</b>			not determined		
<b>Upper explosion limit :</b>			not determined		
<b>Vapour pressure :</b>	( 50 °C )	<	1000	hPa	
<b>Density :</b>	( 20 °C )		0,82	g/cm <sup>3</sup>	Pyknometer (DIN EN ISO 2811-1)
<b>Solvent separation test :</b>	( 20 °C )	<	3	%	Test L1: Solvent separation test (UN)
<b>Water solubility</b>	( 20 °C )		hydrolysed		
<b>pH :</b>			not applicable		DIN 19268
<b>log P O/W :</b>			not determined		(Mixture)
<b>Flow time :</b>	( 23 °C )	approx.	11	s	ISO cup 4 mm (DIN EN ISO 2431)
<b>Odour threshold :</b>			not determined		
<b>Vapourisation rate :</b>			not determined		
<b>VOC content-EC</b>		approx.	79	Wt %	*
<b>VOC-France</b>			A+		Décret no 2011-321 du 23 mars 2011

(\* VOC-EC = „Volatile organic compound (VOC)“ means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa; VOC-value in g/L)

### 9.2 Other information

Data apply to the main component:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics (CAS: 64742-49-0)

Lower explosion limit (Vol-%): 0,8

Upper explosion limit (Vol-%): 6,0

log P O/W: 4,0 - 5,7

Data apply to the main component:

ETHYL ACETATE (CAS: 141-78-6)

Lower explosion limit (Vol-%): 2,1

Upper explosion limit (Vol-%): 11,5

log P O/W: 0,68

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

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**10.3 Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4 Conditions to avoid**

Stable under recommended storage and handling conditions.

**10.5 Incompatible materials**

No data available

**10.6 Hazardous decomposition products**

Does not decompose when used for intended uses.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute effects**

There are no data available on the preparation/mixture itself. Data apply to the main component.

**Acute oral toxicity**

Parameter :	LD50 ( ETHYL ACETATE ; CAS No. : 141-78-6 )
Exposure route :	Oral
Species :	Rat
Effective dose :	5600 mg/kg
Parameter :	LD50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )
Exposure route :	Oral
Species :	Rat
Effective dose :	10760 mg/kg
Method :	OECD 423
Parameter :	LD50 ( Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0) )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Parameter :	LD50 ( Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9) )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg

**Acute dermal toxicity**

Parameter :	LD50 ( ETHYL ACETATE ; CAS No. : 141-78-6 )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	18000 mg/kg
Parameter :	LD50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 14112 mg/kg
Method :	OECD 402
Parameter :	LD50 ( Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0) )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 5000 mg/kg
Parameter :	LD50 ( Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9) )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 5000 mg/kg

**Acute inhalation toxicity**

Parameter :	LC50 ( ETHYL ACETATE ; CAS No. : 141-78-6 )
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Exposure route :	Inhalation
Species :	Rat
Effective dose :	58 mg/l
Exposure time :	8 h
Parameter :	LC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )
Exposure route :	Inhalation
Species :	Rat
Effective dose :	23,4 mg/l
Exposure time :	4 h
Method :	OECD 403

**Specific symptoms in animal studies**

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

**Irritant and corrosive effects**

**Assessment/classification**

Repeated exposure may cause skin dryness or cracking.

**Sensitisation**

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

**Repeated dose toxicity (subacute, subchronic, chronic)**

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

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

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

**Other information**

No indication of human carcinogenicity.

**Germ cell mutagenicity**

There are no data available on the preparation/mixture itself.  
No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

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

**Other information**

No indications of human reproductive toxicity exist.

**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.

**STOT-single exposure**

See SECTION 2.1 (classification).

**STOT-repeated exposure**

See SECTION 2.1 (classification).

**Aspiration hazard**

See SECTION 2.1 (classification).

**SECTION 12: Ecological information**

**12.1 Toxicity**

Data apply to the main component. There are no data available on the preparation/mixture itself.

**Aquatic toxicity**

**Chronic (long-term) fish toxicity**

Parameter :	NOEC ( Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0) )
Species :	Fish
Effective dose :	> 0,1 - 1 mg/l
Parameter :	NOEC ( Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9) )
Species :	Fish
Effective dose :	> 0,1 - 1 mg/l



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**Chronic (long-term) daphnia toxicity**

Parameter : NOEC ( ETHYL ACETATE ; CAS No. : 141-78-6 )

Species : Daphnia

Effective dose : 2,4 mg/l

Exposure time : 21 d

Parameter : NOEC ( Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0) )

Species : Daphnia

Effective dose : > 0,1 - 1 mg/l

Parameter : NOEC ( Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9) )

Species : Daphnia

Effective dose : > 0,1 - 1 mg/l

**Acute (short-term) algae toxicity**

Parameter : EC50 ( ETHYL ACETATE ; CAS No. : 141-78-6 )

Species : Daphnia

Effective dose : 717 mg/l

Exposure time : 48 h

Parameter : EC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Species : Daphnia

Effective dose : 44 mg/l

Exposure time : 48 h

Parameter : EC50 ( Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-49-0) )

Species : Daphnia

Effective dose : > 10 - 100 mg/l

Parameter : EC50 ( Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; CAS No. : (64742-48-9) )

Species : Daphnia

Effective dose : > 1000 mg/l

Exposure time : 48 h

Method : OECD 202

**Chronic (long-term) algae toxicity**

Parameter : NOEC ( ETHYL ACETATE ; CAS No. : 141-78-6 )

Species : Algae

Effective dose : > 100 mg/l

Exposure time : 72 h

Method : OECD 201

**Effects in sewage plants**

Observe local regulations concerning effluent treatment.

**12.2 Persistence and degradability**

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

**Biodegradation**

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

**12.3 Bioaccumulative potential**

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

**12.4 Mobility in soil**

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

**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 Other adverse effects**

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

**12.7 Additional ecotoxicological information**

**Additional information**

The product has not been tested.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose according to legislation.  
Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### Product/Packaging disposal

##### Waste codes/waste designations according to EWC/AVV

###### Waste code product

Waste code (EWC/AVV) : 07 01 04\*

###### Waste code packaging

Waste code packaging: 15 01 10\*

##### Waste treatment options

29/35 - Do not empty into drains; dispose of this material and its container in a safe way. Delivery to an approved waste disposal company.

##### Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

### 13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

## SECTION 14: Transport information

### 14.1 UN number

UN 1993

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

FLAMMABLE LIQUID, N.O.S. ( TURPENTINE SUBSTITUTE · ETHYL ACETATE )

#### Sea transport (IMDG)

FLAMMABLE LIQUID, N.O.S. ( TURPENTINE SUBSTITUTE · ETHYL ACETATE )

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

FLAMMABLE LIQUID, N.O.S. ( TURPENTINE SUBSTITUTE · ETHYL ACETATE )

### 14.3 Transport hazard class(es)

#### Land transport (ADR/RID)

**Class(es) :** 3  
**Classification code :** F1  
**Hazard identification number (Kemler No.) :** 33  
**Tunnel restriction code :** D/E  
**Special provisions :** 640D · LQ 1 I · E 2  
**Hazard label(s) :** 3

#### Sea transport (IMDG)

**Class(es) :** 3  
**EmS-No. :** F-E / S-E  
**Special provisions :** LQ 1 I · E 2  
**Hazard label(s) :** 3

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

**Class(es) :** 3  
**Special provisions :** E 2  
**Hazard label(s) :** 3

### 14.4 Packing group

II

### 14.5 Environmental hazards

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**Land transport (ADR/RID) :** No  
**Sea transport (IMDG) :** No  
**Air transport (ICAO-TI / IATA-DGR) :** No

**14.6 Special precautions for user**

None

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

not required.

**SECTION 15: Regulatory information**

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

**EU legislation**

REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (clp)

Directive 2008/98/EC of the European Parliament and of the Council on waste (2000/532/EC)

EN 2:1992 (DIN EN 2:2005-01)

**Authorisations and/or restrictions on use**

**Restrictions on use**

Use restriction according to REACH annex XVII, no. : None, if handled according to order.

**Restrictions of occupation**

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

**Other regulations (EU)**

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work. (Directive 2000/39/EC, Directive 2006/15/EC, Directive 2009/161/EC)

REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of hazardous chemicals [PIC-Regulation]

REGULATION (EU) No 98/2013 on the marketing and use of explosives precursors: Not applicable.

**Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer**

Not applicable.

Contains the following substances that deplete the ozone layer: -

**Regulation (EC) No 850/2004 [POP-Regulation]**

Not applicable.

Name of the persistent organic pollutant (POP): -

**National regulations**

Observe in addition any national regulations!

Germany:

TRGS 400 (Risk assessment for activities involving hazardous substances)

TRGS 500 (Protective measures)

TRGS 510 (Storage of hazardous substances in non-stationary containers)

TRGS 555 (Working instruction and information for workers)

**Water hazard class (WGK)**

Class : 2 (Significant hazardous to water) Classification according to AwSV

**Other regulations, restrictions and prohibition regulations**

**Switzerland**

**VOCV-Regulation**

Maximum VOC content (Switzerland) : 79 Wt % according to VOCV

**15.2 Chemical safety assessment**

For this substance/mixture a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**16.1 Indication of changes**

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07. Hints on joint storage - Storage class

**16.2 Abbreviations and acronyms**

ABC-Pulver	Extinguishing powder for fire class A, B and C
ABEK-P1	combination filter
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AVV	Abfallverzeichnis-Verordnung (Waste Regulation)
AWSV	Ordinance on facilities for the handling of substances hazardous to water
BGR	BG rules and regulations
ca.	circa
CAS	Chemical Abstract Service
CLP	classification, labelling and packaging
CMR	Carcinogen, mutagen or toxic for reproduction
DIN	German Institute for Standardization
DNEL	Derived No-Effect Level
EAK/EWC/EAC/CWR/CER	European Waste Catalogue
EC50 / CE50	Effective Concentration 50%
EG / EC / CE	European Community
EN	European Standard
EUH	supplemental hazard statement of the european union
GefStoffV	Gefahrstoffverordnung (Hazardous Substances Ordinance)
GHS / SGH	Globally Harmonised System
H-Sätze	hazard statements
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
IMDG-Code	International Maritime Dangerous Goods Code
ISO	International Organization for Standardization
LC50 / CL50	Lethal Concentration 50%
LD50 / DL50	Lethal Dose 50%
log P O/W	Partition coefficient n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (marine pollution)
NOAEL (DSET)	No observed adverse effect level
NOEC (CSEO)	No observed effect concentration
Nr.	Number
OECD	Organisation for Economic Co-operation and Development
PBT	persistent, bioaccumulative and toxic
pH	Potentia hydrogenii
PIC	prior informed consent
PNEC	Predicted No-Effect Concentration
POP	Persistent organic pollutants
P-Sätze	precautionary statements
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International Carriage of Dangerous Goods by Rail
STEL / LECT	short-term exposure limit
TRGS	Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
TWA / MPT	time-weighted average
UN/ONU	United Nations

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)

( EN / D )

**Trade name :** Lithofin NanoTOP

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VOC/COV/VOS/LZO	Volatile Organic Compound
VOCV	Ordinance on the Incentive Tax on Volatile Organic Compounds (SR 814.018)
vPvB	very persistent and very bioaccumulative
WGK	Wassergefährdungsklasse (Water hazard class)

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>. For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

### 16.3 Key literature references and sources for data

Regulation (EC) No 1272/2008 (GHS)

ECHA: Registered substances (<https://echa.europa.eu/information-on-chemicals/registered-substances>)

REACH Art. 59: -Candidate List of substances of very high concern for Authorisation

(<https://www.echa.europa.eu/candidate-list-table>)

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

Hazard statements for physical hazards : On basis of test data.

Hazard statements for health hazards : Calculation method.

Hazard statements for environmental hazards : Calculation method.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

### 16.6 Training advice

None

### 16.7 Additional information

None

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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.

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