

according to Regulation (EC) No 1907/2006

KUNOS Natural Oil Sealer No. 244

Print date: 27.09.2016

Product code: 244

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

1.1. Product identifier

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

Use of the substance/mixture

For interior solid timber. Only to a limited extent suitable for OSB and veneers. Not suitable for plywood, stained wood or cabinet interiors.

1.3. Details of the supplier of the safety data sheet

Company name:	LIVOS Pflanzenchemie Forschungs- und	
	Entwicklungs GmbH & Co. KG	
Street:	Auengrund 10	
Place:	D-29559 Wrestedt	
Telephone:	+49(0)5825-88-0	Telefax: +49(0)5825-8864
e-mail:	info@livos.de	
Internet:	www.livos.de	
Responsible Department:	Produktsicherheit / Product Safety, Email: se	ervice@livos.de
1.4. Emergency telephone	+49 (0)6132-84463 (24h - GBK GmbH)	

<u>number:</u>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

2.2. Label elements

Precautionary statements

P102	Keep out of reach of children.
P301+P310	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor.

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains limonene (orange oil), Cobalt (2+)salts. May produce an allergic reaction.

2.3. Other hazards

Always be sure to store and then dispose of cleaning cloths, polishing pads, sponges, etc. that are still wet or even slightly moist with LIVOS oil in an airtight metal container or in water, as there is a danger of spontaneous combustion caused by the plant oil content. The liquid and applied product itself will not combust spontaneously. In case of insufficient ventilation and use, explosive/flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Depending on color in different proportions: Linseed oil, linseed oil - stand oil - natural resin ester, linseed oil - wood oil - stand oil, highly transparent iron oxide, titan dioxide, natural resin glycerol ester, linseed oil - stand oil, orange oil, isoaliphates, silicic acid, micronized wax, pine oil, rosemary oil, dehydrated amino sugar and drying agents free of lead Ca, Co, Mn, Zr).



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Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regula	tion (EC) No. 1272/2008 [CLP]			
90622-58-5	Isoaliphate			40 - 60 %	
	918-167-1		01-2119472146-39		
	Asp. Tox. 1; H304				
5989-27-5	limonene (orange oil)			.1 - < 1 %	
	227-813-5	601-029-00-7			
	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H226 H315 H317 H400 H410				

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

Wash the affected area with soap and water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Call a physician immediately.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2)., Extinguishing powder, Water spray jet. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Always be sure to store and then dispose of cleaning cloths, polishing pads, sponges, etc. that are still wet or even slightly moist with LIVOS oil in an airtight metal container or in water, as there is a danger of spontaneous combustion caused by the plant oil content. The liquid and applied product itself will not combust spontaneously.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Keep away from heat.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Keep away from heat.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

For interior solid timber. Only to a limited extent suitable for OSB and veneers. Not suitable for plywood, stained wood or cabinet interiors.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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.

Skin protection

Wear suitable protective clothing.



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Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

Information on basic physical and c Physical state:	liquid	
Colour:	different colors	
Odour:	characteristic	
	Te	st method
pH-Value:	not applicable	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	> 100 °C	
Flash point:	> 61 °C	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties In case of insufficient ven	tilation and use, explosive/flammable mixtures may develop	
Lower explosion limits:		
Upper explosion limits:		
Ignition temperature:	> 200 °C	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
Oxidizing properties No data available		
Vapour pressure:	not determined	
Density:	0,86 - 1,01 g/cm³	
Water solubility:	insoluble	
Solubility in other solvents not determined		
Partition coefficient: Viscosity / kinematic: (at 40 °C)	not determined >14 mm²/s	
Vapour density:	not determined	
Evaporation rate:	not determined	
. Other information		
Solid content:	not determined	
No information available.		

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SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Strong acid. Oxidising agent, strong

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Method	Dose	Species	Source
90622-58-5	Isoaliphate				
	oral	LD50	> 5000 mg/kg	Rat	
	dermal	LD50	> 5000 mg/kg	Rabbit	
5989-27-5	limonene (orange oil)	_			
	oral	LD50	> 2000 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rabbit	IUCLID

Irritation and corrosivity

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

Sensitising effects

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

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

Observe risk of aspiration if vomiting occurs.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.



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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
90622-58-5	Isoaliphate					
	Acute fish toxicity	LC50	> 1000 mg/l	96 h	fish	
	Acute algae toxicity	ErC50	> 1000 mg/l	72 h	Algae	
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h	Daphnia magna	
5989-27-5	limonene (orange oil)					
	Acute fish toxicity	LC50	0,7 mg/l	96 h	Pimephales promelas	
	Acute crustacea toxicity	EC50	0,42 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
5989-27-5	limonene (orange oil)	4,23

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

Other applicable information (marine transport)

No dangerous good in sense of these transport regulations.



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Air transport (ICAO)

Other applicable information (air transport)

No dangerous good in sense of these transport regulations.

14.6. Special precautions for user

No information available.

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

not applicable

SECTION 15: Regulatory information

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

EU regulatory information	
2010/75/EU (VOC):	40 - 51 %
2004/42/EC (VOC):	40 - 51 %
Additional information	

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

National regulatory information

Water contaminating class (D):

2 - water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,7,9,11,12,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50% LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains limonene (orange oil), Cobalt (2+)salts. May produce an allergic reaction.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The



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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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)