

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006

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

1.1. Product identifier:

Linseed oil paint Outdoor – Category 3

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

Paint for outdoor use on buildings etc. Applied with brush, roller etc.

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

Linolie & Pigment

Øsbygade 46 Phone: 7575 2382

DK-6100 Haderslev

Responsible person for the safety data sheet (e-mail): info@linolie.dk

1.4. Emergency telephone number:

NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

National Poisons Information Centre (Ireland): +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week).

Healthcare Professionals: +353 (1) 809 2566 (24-hour service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Sensitizing and irritant liquid. Hazardous to the aquatic environment.

CLP (1272/2008): Skin Sens. 1;H317 Skin Irrit. 2;H315 Eye Irrit. 2;H319 Aquatic Chronic 2;H411

2.2. Label elements:





WARNING

Contain: 4,5-Dichloro-2-octyl-2*H*-isothiazol-3-one

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H411: Toxic to aquatic life with long lasting effects.

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P264: Wash hands thoroughly after handling. P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection. P333+P313:If skin irritation or rash occurs: Get medical advice/attention.

P501: Dispose of contents/container in accordance with applicable regulations.

2.2. Other hazards:

Rags soaked with the product may cause spontaneous combustion.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

Endocrine disrupting properties: The substances are not identified as having endocrine disrupting properties in accordance with the criteria set out in Regulation 2017/2100 or Regulation 2018/605.



SECTION 3: Composition/information on ingredients

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% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH regno.	Classification	Note
10-<60	Titanium dioxide	13463-67-7	236-675-5	022-006-00-2	01-2119489379-17	Carc. 2;H351i	1,2
5-<20	Zinc oxide	1314-13-2	215-222-5	030-013-00-7	01-2119463881-32	Aquatic Acute 1;H400 (M=1)	-
						Aquatic Chronic 1;H410	
< 10	Carbon black	1333-86-4	215-609-9	-	01-2119384822-32	None	1,3
< 0.1	4,5-Dichloro-2-	64359-81-5	264-843-8	-	-	Acute Tox 2;H330	4
	octyl-2H-isothiazol-					Acute Tox 4;H302	
	3-one					Skin Sens. 1A;H317	
						Skin Corr. 1;H314	
						Eye Dam. 1;H318	
						Aquatic Acute 1;H400 (M=10	0)
						Aquatic Chronic 1;H410 (M=1	100)

- 1) The substance has an occupational exposure limit.
- 2) The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1% or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \ \mu m$.
- 3) The substance is present in the colours: Almueblå, Vogngrøn og Portgrøn.
- 4) SCL (Specific Concentration limits) for classification: Skin Irrit. 2;H315/Eye Irrit. 2;H319: 0.025% ≤ C < 3%; Skin Sens. 1A;H317: C ≥ 0.0015% (EU Harmonized). ATE (oral) = 567 mg/kg; ATE (inhalation) = 0.16 mg/l (dusts/mists)

Wording of hazard statements - see section 16.

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation: Move the affected person to fresh air. Keep at rest. If symptoms persist: Seek medical advice.

Skin contact: Remove all contaminated clothing. Wash skin with water and mild soap. In case of rash, wound, or other skin

irritation: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eyelids open; remember to remove contact lenses, if

any. If irritation persist: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. **Do not induce vomiting.** If vomiting occurs keep head down to avoid

vomit in the lungs. Seek medical advice.

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

Skin sensitization and irritation with redness, itching, blisters and eczema. Causes serious eye irritation with redness and pain.

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Firefighting measures

5.1. Extinguishing media:

Use carbon dioxide, dry chemical or foam.

5.2. Special hazards arising from the substance or mixture:

Do not inhale smoke fumes. In case of fire, the substance may form hazardous decomposition products: Primarily oxides of carbon.

5.3. Advice for firefighters:

Wear self-contained breathing apparatus when generation of smoke is vigorous.



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use gloves of rubber when spill is wiped up – see section 8. Avoid further spreading. Ventilate area of spill.

6.2. Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Take up with absorbent material (e.g. general-purpose binder) and place in marked container for disposal.

All contaminated rags, paper etc. may be subject to spontaneous combustion under certain conditions. Place all contaminated material in a metal container, which contains water, with a tight-fitting lid. Remove from premises immediately.

Clean with water. Dispose of in accordance with local regulations or burn under controlled conditions.

Further handling of spillage - see section 13.

6.4. Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Provide sufficient ventilation. Wash contaminated skin immediately with water and mild soap. Contaminated clothes or absorbent material is kept under water until disposal or cleaning. Moisturisers prevents drying of the skin and may be used with great advantage after work.

7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed original container of metal. Keep in a dry and well-ventilated place.

Store securely and out of reach of unauthorized personnel and separated from food, feed, drugs etc.

7.3. Specific end use(s):

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

Occupational exposure limits,	UK (EH40/ed.2020):		
Substance	8-hour TWA	15-min STEL	Comments
Titanium dioxide, total inhal.	10 mg/m^3	=	-
Carbon black	3.5 mg/m^3	3.5 mg/m^3	-

Occupational exposure limit values, Ireland (2020):	8-hour TWA	15-min STEL	Notes
Titanium dioxide, total inhal.	10 mg/m^3	-	-
Titanium dioxide, respirable dust	4 mg/m^3	-	-
Zinc oxide, fume	$2 \text{ mg/m}^3 (R)$	10 mg/m^3	-
Carbon black	$3 \text{ mg/m}^3 \text{ (I)}$	-	-

I: Inhalable Fraction R: Respirable Fraction

DNEL:	<u>Exposure</u>	Value	Population	Effects
Zinc oxide	Long term, inhalation	6.2 mg/m^3	Worker	Local
	Long term, dermal	6223 mg/kg/d	Worker	Local
	Long term, oral	62.2 mg/kg/d	Worker	Local
	Long term, inhalation	6.2 mg/m^3	Consumer	Local
	Long term, dermal	622 mg/kg/d	Consumer	Local
PNEC:	Medium	Value		
Zinc oxide	Fresh water	25.6 μg/l		
	Sea water	7.6 μg/l		
	Fresh water sediment	146 mg/kg		
	Sea water sediment	70.3 mg/kg		
	Sewage treatment plant	64.7 μg/l		

Soil

44.3 mg/kg

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SECTION 8: Exposure controls/personal protection (continued)

8.2. Exposure controls:

Appropriate engineering controls: Provide sufficient ventilation.

Personal protective equipment:

Inhalation: Normally not required when applied with brush or roller.

Skin: Wear protective gloves of nitrile rubber (> 0.3 mm) (EN 374). It has not been possible to find data for

breakthrough time. In case of spill on the glove, it is recommended to change it after use.

Eyes: Wear tight fitting safety goggles (EN 166) when there is risk of splashes.

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Physical state: Liquid

Colour:

Odour:

Melting point/freezing point (°C):

Boiling point or initial boiling point and boiling range (°C):

Flammability (solid, gas):

Lower and upper explosion limit (vol-%):

Different colours

Linseed oil

Not determined

Not relevant (liquid)

Not determined

Flash point (°C): App. 220 (for pure linseed oil)

Auto-ignition temperature (°C):

Decomposition temperature (°C):

Not determined

PH:

Not determined

Not determined

Not determined

Not determined

Not determined

Vapour pressure:

Not determined

Not determined

Not determined

Not determined

Not determined

Density and/or relative density: 1.3-2

Relative vapour density:

Particle characteristics:

Not determined

9.2. Other information:

None relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity:

No available data.

10.2. Chemical stability:

Stable under normal conditions (see section 7).

10.3. Possibility of hazardous reactions:

Warning: Combustible materials such as rags, paper or cloths soaked with the product may cause spontaneous combustion

10.4. Conditions to avoid:

Avoid excessive heating.

10.5. Incompatible materials:

May react with oxidizing materials.

10.6. Hazardous decomposition products:

In case of extensive heating, the mixture may form hazardous decomposition product such as oxides of carbon, short chain fatty acids, polymers and acrolein.



SECTION 11: Toxicological information

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

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

Skin corrosion/irritation: Skin Irrit. 2;H315 Causes skin irritation.

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

Respiratory or skin sensitization: Skin Sens. 1;H317 May cause an allergic skin reaction. Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: Based on available data, the classification criteria are not met. STOT-single exposure: Based on available data, the classification criteria are not met. STOT-repeated exposure: Based on available data, the classification criteria are not met.

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

Hazard class	Data	Test	Data
			source
Acute toxicity:			
Inhalation	LC_{50} (rat) = 0.16 mg/l/4h (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 403	Supplier
	LC_{50} (rat) > 5700 mg/m ³ /4h (Zinc oxide, dust/spray)	No data	Supplier
	LC_{50} (rat) > 6.8 mg/l/4h (Titanium dioxide)	No data	Supplier
Dermal	LD_{50} (rabbit) > 652 mg/kg (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 402	Supplier
Oral	LD_{50} (rat) > 15 g/kg (Linseed oil)	No data	Supplier
	LD_{50} (rat) > 15 g/kg (Zinc oxide)	No data	Supplier
	LD_{50} (rat) > 10 g/kg (Titanium dioxide)	No data	Supplier
	LD ₅₀ (rat) > 8000 mg/kg (Carbon black)	No data	Supplier
	LD_{50} (rat) = 567 mg/kg (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 401	Supplier
Corrosion/	Moderate skin irritation, man (Linseed oil)	Draize	RTECS
irritation:	Corrosion, rabbit (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 404/405	Supplier
Sensitization:	Skin sensitization, guinea pig (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 406	Supplier
CMR:	No mutagenicitet – negative result (Linseed oil)	No data	TOXNET
	No effect on fertility/offspring (Linseed oil)	No data	TOXNET
	No carcinogen effects in animals (Linseed oil)	No data	TOXNET

Information on likely routes of exposure: Skin and ingestion.

Symptoms:

Inhalation: Slight irritation of the airways. Large amounts may cause discomfort. Skin: May cause irritation with redness by prolonged contact with skin.

Eyes: May cause irritation with redness and pain.

Ingestion: May cause irritation of the gastrointestinal tract and discomfort, nausea and diarrhea.

Chronic effects: Frequent skin contact with 4,5-dichloro-2-octyl-2H-isothiazol-3-one may cause skin sensitisation with

symptoms such as redness, itching, blisters and eczema.

The material contains carbon black, which is recorded in the Danish Working Environment Authority's list of substances considered to be carcinogenic. The substance has caused cancer when inhaled in animal experiments (rats), but since this material is not expected to be possible to inhale, the risk of developing cancer in humans in connection with working with the product is therefore considered minimal. In several experiments with mice, no carcinogenic effect on the skin is observed.

classification does not lead to a CLP classification as carcinogenic. There is no significant exposure to

Titanium dioxide is classified by IARC as group 2B (Possibly carcinogenic to humans). However, this

titanium dioxide from liquid products containing titanium dioxide (IARC, Vol. 93).

11.2. Information on other hazards: None known.

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SECTION 12: Ecological information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Data source
Fish	LC_{50} (Danio rerio, 96h) = 1.79 mg/l (Zinc oxide)	No data (FW)	ECHA
	LC ₅₀ (Oncorhynchus mykiss, 96h): 1.1-2.5 mg/l (Zinc oxide)	No data (FW)	Supplier
	LC_{50} (Fish, 96h) = 0.003 mg/l (4,5-Dichloro-2-octyl-2 <i>H</i> -isothiazol-3-one)	OECD 203	Supplier
Daphnia	EC_{50} (Daphnia magna, 48h) = 0.0052 mg/l (4,5-Dichloro-2-octyl-2 <i>H</i> -	No data (FW)	Supplier
	isothiazol-3-one)		
Algae	EC_{50} (Selenastrum capricornutum, 72h) = 0.17 mg/l (Zinc oxide)	OECD 201 (FW)	IUCLID
	NOEC (Pseudokirchneriella subcapitata, 72h) = 0.017 mg/l (Zinc oxide)	No data (FW)	Supplier
	EC ₅₀ (Pseudokirchnerella subcapitata, 96h) = 0.077 mg/l (4,5-Dichloro-2-	OECD 201 (FW)	Supplier
	octyl-2 <i>H</i> -isothiazol-3-one)		

12.2. Persistence and degradability:

Methods are missing for determining the biodegradability for inorganic substances such as pigments.

4,5-Dichloro-2-octyl-2*H*-isothiazol-3-one was degraded 0% at an OECD 301B test and is not considered rapidly degradable.

12.3. Bioaccumulative potential:

Zinc oxide: Log $K_{ow} = 2.2$ (moderate bio accumulative effect).

4,5-Dichloro-2-octyl-2*H*-isothiazol-3-one: Log K_{ow} = 3.59 (moderate bioaccumulative effect).

12.4. Mobility in soil:

Zinc oxide: $K_{oc} \le 50$ (very high mobility expected in soil environments).

12.5. Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

12.6. Endocrine disrupting properties:

None known.

12.7. Other adverse effects:

4,5-Dichloro-2-octyl-2*H*-isothiazol-3-one is considered an organic halogen compound (AOX).

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

The mixture is not considered as hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

Waste from linseed oil paint must be immersed in water to avoid spontaneous combustion.

EWC-code:

08 01 11 (mixture itself) and 15 02 02 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

14.1. UN number or ID number: 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc oxide;

4,5-Dichloro-2-octyl-2*H*-isothiazol-3-one)

14.3. Transport hazard class(es): 9

14.4. Packing group: III

14.5. Environmental hazards: Yes

14.6. Special precautions for user: None.

14.7. Maritime transport in bulk according to IMO instruments: Not relevant.



SECTION 15: Regulatory information

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

Must not be used by persons under 18 years of age.

Special labelling:

VOC subcategory: A/d VOC limit value (g/l): 300 VOC content (g/l): < 5

Danish 1993-Code no.: 00-1

15.2. Chemical safety assessment:

The product contains at least one substance with an exposure scenario. RMM and OC here from have been incorporated in this SDS.

SECTION 16: Other information

Hazard statements mentioned in section 3:

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H330: Fatal if inhaled.

H351i: Suspected of causing cancer. H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

 EC_{50} = Effect Concentration 50%

FW = Fresh Water

LC₅₀ = Lethal Concentration 50%

 LD_{50} = Lethal Dose 50%

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = REACH Registration dossier from ECHA's home page.

IARC = International Agency for Research on Cancer

IUCLID = International Uniform ChemicaL Database Information

RTECS = Register of Toxic Effects of Chemical Substances.

TOXNET = Toxicology Data Network via Toxline database

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Changes since the previous edition:

1, 2, 3, 4, 8, 9, 11, 12, 13, 14 & 16

Prepared by: Altox a/s - Tonsbakken 16-18 - 2740 Skovlunde - Phone +45 38 34 77 98 / PH - Quality control: PW