



# SAFETY DATA SHEET

Issue date 31 March 2015

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product identifier	Linseed oil wax
1.2 Relevant identified uses of the substance or mixture and uses advised against	For painting and surface treatment of painted or unpainted surfaces. Sector Use - SU: SU19 Building and construction work SU20 Health services SU21 Private households (= general public = consumers) SU22 Professional uses: Public domain Chemical Product Category: PC9a Coatings and paints Process categories [PROC]: PROC10 Roller application or brushing Environmental Release Categories: ERC 8C Wide dispersive indoor use resulting in inclusion into or onto a matrix (paint) ERC 8F Wide dispersive outdoor use resulting in inclusion into or onto a matrix (paint)
1.3 Details of the supplier of the safety data sheet	Allbäck Linoljeprodukter AB
Address	Östra Balkåkravägen 18 SE-271 91 Ystad Sweden
Phone	+46-(0)411-602 02
e-mail	allback@allbackpaint.com
Contact	Sonja Allbäck
1.4 Emergency telephone number	24 hours service is available at <a href="http://www.nhs.uk">www.nhs.uk</a> Call 112 or 999 if an acute emergency. If less acute call 111.
Issued by	Ann Martens, Ramböll Sweden AB, +46-(0)10 615 54 47

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not classified as hazardous for health or environment.

### 2.2 Label elements

No hazard label required.

Other label required according to the VOC-directive and CLP.

Binding primers, category h, VOC <35 g/l Limit < 750 g/l. Phase II, from 2010.

EUH210 — 'Safety data sheet available on request'.



### 2.3 Other hazards

Risk for spontaneous combustion if the linseed oil is absorbed by porous organic material (cotton waste or rag). This oxidation, which gives rise to heat, can happen even at room temperature, but raised temperature increases the risk.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

EC-no	CAS-no	REACH reg. no.	Components name	Conc. wgh/wgh	Classification	Comment
232-278-6	8001-26-1	Exempted from registration	Linseed oil (boiled)	30-90 % (depending of the colour)	-	-
240-085-3	15956-58-8	Not known	2-Ethylhexanoic acid, manganese salt (only in boiled linseed oil)	0,07 mg/litre wax	CLP: Eye Irrit. 2 H319, Repr. 2 H361 (Oral) (H361d), STOT RE 2 H373 (neurological effects) (Inhalation) H373 Aquatic Chronic 2 H411 DSD: Xi; R36 - Xn; R48/20/22 - R63 - N; R51/53	-
232-383-7 616-889-9	8012-89-3 (white beeswax) 8006-40-4 (yellow beeswax)	Exempted from registration	Beeswax	5-10 %	-	-
215-279-6	1317-65-3		Chalk (Calcium carbonate)	0-30 % (depending on the colour)	-	WEL
			Colours:			
			Naturell No pigment			
215-168-2 215-277-5	1309-37-1 1317-61-9		Brown Iron oxides Fe <sub>2</sub> O <sub>3</sub> Fe <sub>3</sub> O <sub>4</sub>	25-40 %		WEL -
			Oak Iron oxides			



215-168-2	1309-37-1		Fe2O3 Fe3O4	15-20 %		WEL -
215-277-5	1317-61-9			15-20 %		-
243-746-4	20344-49-4		FeOOH			-
215-168-2	1309-37-1		Mahogany Iron oxides Fe2O3	35-45 %		WEL
215-277-5	1317-61-9		Fe3O4	1-3 %		-
236-675-5	13463-67-7	01-2119489379-17	Grey Titandioxid	25-35 %		WEL
243-746-4	20344-49-4		Iron oxides FeOOH	1 %		-
215-277-5	1317-61-9		Fe3O4	2 %		-
236-675-5	13463-67-7		Mole Titandioxid Iron oxides	20-25 % 5-7 %		WEL -
243-746-4	20344-49-4		FeOOH	1-2 %		
215-168-2	1309-37-1		Fe2O3			WEL
215-277-5	1317-61-9		Fe3O4	1-3 %		-
215-168-2	1309-37-1		Red Iron oxide Fe2O3	40-50 %		WEL
215-277-5	1317-61-9		Black Iron oxide Fe3O4	40-50 %		-
236-675-5	13463-67-7	01-2119489379-17	White Titandioxid	30-40 %		WEL
<p>Explanation of abbreviations:  CAS-no = Chemical Abstracts Service; EC-no (Einecs- or Elincs number) = European inventory of Existing Commercial Chemical of Substances or European List of Notified Chemical Substances.  Content given in either %, %weight/weight, %vol/weight, %vol/vol, mg/m<sup>3</sup>, ppb, ppm, weight%, vol%.  T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Highly flammable, N = Dangerous for the environment, Canc. = Carcinogen, Mut = Mutagen, Rep = Toxic to Reproduction.  OEL = The product has an occupational exposure limit, PBT = The product is a PBT or vPvB substance.</p>						

Comments: Substances are declared according to directive 99/45/EG and amendments.

Linseed oil contains mainly of natural triglycerides from oleic, linoleic, palmitic acid, linolenic acid and stearic acid

For risk phrases in full text see section 16.



## 4. FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	Not relevant with this product.
Skin contact	Wash the skin with water and linseed soap.
Eye contact	Remove contact lenses. Rinse the eyes for a couple of minutes. If symptoms persist, seek a physician.
Ingestion	Drink copious amounts of milk. The product is a laxative in large amounts, but no risk for intoxication.
4.2 Most important symptoms and effects, both acute and delayed	
Inhalation	May cause some transient irritation to the respiratory tract.
Skin contact	Has no effect on skin.
Eye contact	Can give transient mild irritation.
Ingestion	Laxative.
4.3. Indication of any immediate medical attention and special treatment needed	Access to water for rinsing eyes at the working place.

## 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media a. Recommended Extinguishing media b. Not Recommended Extinguishing media	a. Extinguish with foam, carbon dioxide, powder or water spray depending on what is burning b. Foam containing substances that are harmful for the environment.
5.2 Special hazards arising from the substance or mixture	Risk for spontaneous combustion if the linseed oil is absorbed by porous organic material (cotton waste or rag). This oxidation, which give rise to heat.
5.3 Advise for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	For personal protection equipment see section 8. Wash skin or contaminated clothes with soap (or linseed soap) and water.
6.1.2 For emergency responders	Wash with water.
6.2 Environment precautions	Prevent discharge to the sewage system.
6.3 Methods and material for containment and cleaning up 6.3.1. Surrounding embankment /sealing 6.3.2 Recommended cleaning up	Make embankments with sand or other inert absorbent and collect. Small amounts can be washed away with water. The product is easily biodegradable in nature. If organic fibrous material is used for cleaning it is a fire risk and the material should be soaked in water.



measures 6.3.3 Non-recommended measures	
6.4 Reference to other sections	For personal protection see section 8. For disposal of waste, see section 13.

## 7. HANDLING AND STORAGE

7.1 Precaution for safe handling	Avoid spills and prevent large quantities of the product to reach sewage system or surface water. Avoid eating, drinking and smoking in the working area. Wash hands after using the product. Remove contaminated clothing before meals. Be aware of fire hazard in porous organic materials. Immerse rags in water.
7.2 Condition for safe storage, including any incompatibilities	Store the product at room temperature. Store out of reach of children and away from food.
7.3 Specific end use(s)	No specific end uses.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

National occupational exposure limits values, EH 40, 2005 with updates

CAS-nr	Substance name	WEL 8 h	WEL 5 min	WEL 15 min
1309-37-1	Iron oxide fume (as Fe)	5 mg/m <sup>3</sup>		10 mg/m <sup>3</sup>
13463-67-7	Titanium dioxide total inhalable respirable	10 mg/m <sup>3</sup> 4 mg/m <sup>3</sup>		
1317-65-3	Calcium carbonate inhalable dust respirable dust	10 mg/m <sup>3</sup> 4 mg/m <sup>3</sup>		

WEL=Workplace Exposure Limit

### PNEC DNEL/DMEL

PNEC and DNEL/DMEL not established for linseed oil.

Values below from REACH registration of titanium dioxide.

CAS-no	Substance	PNEC (type of environment)	DN(M)EL (route of exposure)	Exposure scenario annex
13463-67-7	Titanium dioxid	PNEC (aqua freshwater) 0,127 mg/L  PNEC (aqua marine)	Workers Longtime exposure local effect DNEL Inhalation 10 mg/m <sup>3</sup>	Saknas



		water) 1 mg/L  PNEC aqua (intermittent releases) 0,61 mg/L  PNEC STP 100 mg/L  PNEC sediment (fresh water) 1000 mg/kg Sediment dw  PNEC sediment (marine water) 100 mg/kg sediment Dd  PNEC soil 100 mg/kg dw	Consumers Longtime exposure systemic effect  Oral DNEL 700 mg/kg bodyweight/day  For other DNEL/DMEL data is missing	
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Biological limit values	None
Recommended surveillance procedure	None

## 8.2 Exposure controls

8.2.1 Recommended technical control measures	None
8.2.2 Individual protection measures, e.g. personal protection equipment	
Eye/face protection	None.
Skin protection i) Hand protection (material, thickness, breakthrough time) ii) Other protection	i) None. ii) Normal working clothes. No special protection
Respiratory protection	None
8.2.3 Environmental exposure control	Avoid large leakage to surface water or sewage system

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance/State of aggregation	Paste
Colour	Light grey brown
Odour	Linseed
Density	appr. 1 kg/l (naturell)



	appr. 2 kg/l (mean) pigmented wax
Boiling point	349 °C (linseed oil)
Melting point	-19°C (linseed oil)
Flash point	222°C (linseed oil)
Auto ignition temperature	343°C (linseed oil)
Oxidizing properties	Oxidizing. Can self ignite in porous materials
Solubility in water	Can only emulsify and is not soluble in water.
Solubility in other solvents	The product is partially soluble in many solvents, but it is not recommended to mix with solvents.

## 9.2 Other information

VOC content	< 35 g/l
Emission Factor, Volatile organic compounds, TVOC	64 µg/(m <sup>2</sup> xh) after 4 drying time of linseed oil paint (pure linseed oil is not tested), 18 µg/(m <sup>2</sup> xh) after 26 week drying time.

## 10. STABILITY AND REACTIVITY

10.1 Reactivity	The product is not reactive during normal handling and storage conditions.
10.2 Chemical stability	Stable at normal storing conditions
10.3 Possibility of hazardous reactions	None
10.4 Conditions to avoid	Do not store above normal room temperature.
10.5 Incompatible materials	Strong acids, bases and oxidizing agents.
10.6 Hazardous decomposition products	None

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

General information: Linseed oil is a common animal nutrition additive and has no known toxicological hazards. There are even some studies that indicate positive health effects of new pressed linseed oil. The added manganese siccativ makes it however unsuitable to ingest.

Inhalation: Linseed oil LC50 (4h) > 20 mg/l (IMO). Inhalation is not relevant for the product. The product consumes oxygen when drying and good ventilation is necessary. If inferior ventilation exists, there is a risk for headache.

Skin contact: Repeated contact might dry the skin, but during normal use there is no hazard.

Acute toxicity: Linseed oil: >15000 mg/kg body weight.

Ingestion: Linseed oil is a laxative, but single ingestion will not give raise to any hazard.

Sensitization: Not a sensitizer.

Carcinogenic effects: None known.

Reproductive toxicity: None known.

Mutagenic effects: None known.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Acute toxicity:

Linseed oil has low toxicity for aquatic organisms.



LC50 > 1000 mg/L (DHI report)

Long term toxicity: The product will probably not have any adverse long term effect for the aquatic environment, but data is lacking.

Terrestrial organisms: The product is probably not harmful for terrestrial organism, but data is lacking.

Plants: The product is probably relatively harmless for plants, but data is lacking.

Effects on micro-organisms living in wastewater treatment plants

The product has no known effect on microorganism living in wastewater treatment plants.

#### 12.2 Persistence and degradability

The product is easily degradable (DHI report).

#### 12.3 Bioaccumulative potential

The product will not bioaccumulate.

BCF appr 10.

#### 12.4 Mobility in soil

The product is water soluble but easily degradable and thus the mobility in soil will not be so high.

#### 12.5 Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substance.

#### 12.6 Other adverse effects

None known.

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	<p>a) Emptied plastic package are sorted as hard plastic. The packaging material consists of polypropylene. The product could be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.</p> <p>b) There are no physical/chemical properties that may affect the waste treatment solutions.</p> <p>c) Larger residues should not be released to the sewage system. No special security measures concerning waste treatment methods are needed.</p>
Waste codes (EWC)	Depends where the waste is produced, but suitable codes are 20 01 28, 08 01 14, 07 01 99 or 08 01 17.
The product is classified as hazardous waste	No.
Waste codes (EWC) for the container	A suitable code for the package is 15 01 02, 15 01 04 or 15 01 07.
A not thoroughly cleaned container is considered dangerous waste	No
Other information	See section 8 for personal protection during disposal of waste.





## 14. TRANSPORT INFORMATION

General	Not classified as hazardous goods
14.1 UN number	-
14.2 UN Proper Shipping Name	-
14.3 Transport hazard class(es)	-
14.4 Packing group	-
14.5 Environmental hazards	-
14.6 Special precautions for users	-
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	The product is not transported in bulk, but if it will happen in the future this product is listed in Annex II of the Marpol convention. Vegetable oil floating on water is also listed as IMO category 2. Vegetable oils pollution category Y, ship type 2.

## 15. REGULATORY INFORMATION

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture  
No relevant.

15.2 Chemical safety assessment  
Chemical safety assessment is not made for linseed oil as it is exempted from registration according to REACH.

## 16. OTHER INFORMATION

VOC is determined according to ISO 11890-2. The volatile VOC will probably remain in the colour due to cross-binding reactions. This has been shown in emission measurements during painting with linseed oil paint.

Hazard and Precautionary statements from section 2 and 3 in plain text (CLP):

Eye Irrit. 2 H319	Serious eye damage/eye irritation, Hazard Category 2 Causes serious eye irritation.
Repr. 2 H361d	Reproductive toxicity, Hazard Category 2 Suspected of damaging fertility or the unborn child (oral).
STOT RE 2	Specific target organ toxicity — Repeated exposure, Hazard Category 2
H373	May cause damage to organs (neurological effects) through prolonged or repeated exposure (Inhalation).
Aquatic Chronic 2 H411	Hazardous to the aquatic environment — Chronic Hazard, Category 2 Toxic to aquatic life with long lasting effects.

Risk and Safety phrases from section 2 and 3 in plain text DSD 67/548/EEC:

Xi = Irritant



R36 Irritating to eyes.

Xn = Harmful

R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R63 Possible risk of harm to the unborn child.

N = Dangerous for the environment

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Sources for data in this MSDS

- MSDS from supplier of ingredients for this product.
- IUCLID (International Uniform Chemical Information Database) Chemical Data Sheets, Data base European commission
- ESIS (European chemical Substances Information System).
- Prevent, Chemical Substances database, (<http://kemi.prevent.se/>)
- European Commission DG Environment Report October 2008 from DHI. Review of Annex IV of Reg. 1907/2006 Contract No. 070307/2007/473055/MAR/D1 and appendix 2 Evaluation of existing entries, Linseed oil.

#### Other information:

Linseed oil is exempted from registration according to Annex V in REACH.

The safety data sheet is based on Annex II of the REACH regulation 1907/2006/EC and the CLP regulation EC 1272/2008.