SAFETY DATA SHEET

Issue date: 21 January 2021
Supersedes: 7 September 2015

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

1.1 Product identifier	Linus Wall Paint This SDS is valid for the below colours. All other colours are mixed from Linus Wall Paint White with separate pigment mixtures. See SDS for the different colours
1.2 Relevant identified uses of the substance or mixture and uses advised against	For outdoor and indoor painting. For painting on wood, concrete, wallpaper and other materials. 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	
Supplier/Importer EU	Allbäck Linoljeprodukter AB
Address	Östra Balkåkravägen 18 SE-271 91 Ystad Sweden
Telephone number	+46-411-602 02
Contact person	Sonja Allbäck
e-post	allback@allbackpaint.com
1.4 Emergency telephone number	24 hours service is available at www.nhs.uk Call 112 or 999 if an acute emergency. If less acute call 111.
SDS issued by	Ann Martens, Ramböll Sverige AB, +46 (0)10-615 54 47

Section 2: Hazards identification

2.1 Classification of the substance or mixture

EUH 211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.2 Label elements

EUH 211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Other label required

Interior/exterior trim and cladding paints for wood and metal, category d, VOC < 38 g/l. Limit 300 g/l Phase II, from 2010.

EUH210 — 'Safety data sheet available on request'.

2.3 Other hazards

None

Section 3: Composition/information on ingredients

EC-no	CAS-no/ REACH reg. no.	Name of component	Conc. wt/wt	Classification	Com.
232-278-6	8001-26-1	Linseed oil	10-20 %	-	-
240-085-3	15956-58-8 / 01-2119979087-23-0000	2-Ethylhexanoic acid, manganese salt (only in boiled Linseed oil)	0,05 mg/litre paint	Eye Irrit. 2 H319, Repr. 2 H361 (Oral) (H361d), STOT RE 2 H373 (neurologiska effekter.) (Inhalation) H373 Aquatic Chronic 2 H411	-
205-743-6	149-57-5 / 01-2119488942-23	2-Ethyl hexane acid	0,06 %	Repr. 2 - H361d	--
236-675-5	13463-67-7 REACH-reg nr. 01-2119489379-17-0021 och 01-2119489379-17-0022	Titanium dioxide	0-30 %. Varies with the colour. See below.	Carc 2, H351 (inhalation)	WEL
215-279-6	1317-65-3	Chalk (Calcium carbonate)	Varies with the colour (4-20 %)	-	WEL
231-791-2	7732-18-5	Water	25-30 %	-	-
		Different colours			-

236-675-5 215-279-6	13463-67-7 1317-65-3	White Titanium dioxide Calcium carbonate	27-30 % Titanium dioxide Calcium carbonate 15-20 %	- Carc. 2 H351 -	- WEL WEL
215-277-5 215-279-6	1317-61-9 1317-65-3 / 01-2119457646-28-0000	Black Iron oxide (Fe3O4) Calcium carbonate	0 % Titanium dioxide 40-45 % Iron oxide 4-5 % Calcium carbonate	Carc. 2 H351 - -	 WEL WEL
215-168-2 215-279-6	1309-37-11317-65-3	Russet red (Brick red) Iron oxide (Fe2O3)		-	WEL
		Other colours are mixtures of the above colours and added pigment powders. This mixture is done by the customer.	0 % Titanium dioxide 40-45 % Iron oxide 4-5 % Calcium carbonate	Carc. 2 H351 - -	 WEL

Explanation of abbreviations:
CAS-nr. = Chemical Abstracts Service; EU-no (Einecs- or Elincsnumber) = European Inventory of Existing Commercial Chemical Substances or European LIst of Notified Chemical Substances. Content specified as; %, %wt/wt, %vol/wt, %vol/vol, mg/m^3, ppb, ppm, wt%, vol%.
WEL = The product has a workplace exposure limit, PBT = The product is declared since it's a PBT- or a vPvB-substance.

Comments: Linseed oil contains mainly natural triglycerides from oleic, linoleic, palmitic acid, linolenic acid and stearic acid. CAS 8554-56-3 is also possible for Linseed oil.
The product contains 0.01-0.1 % quartz as a natural contaminate in chalk. The amount of respirable quartz is very low.
The pigments for other colours are distributed as powders for own mixture in the paint and is not covered in this SDS.
For risk phrases in plain text, see section 16.

Section 4: First aid measures

4.1 Description of first aid measures	
Inhalation	Not relevant, except when spraying the product. If irritation occurs, move to fresh air and rest.
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. Do not provoke vomiting.

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	Provides 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.

Section 5: Firefighting measures

5.1 Extinguishing media a. Recommended Extinguishing media b. Not Recommended Extinguishing media	a. The product does not burn. Extinguish surrounding fire 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	None
5.3 Advise for firefighters	Do not inhale fumes. Wear self-contained breathing apparatus for fire fighting if necessary. Cool surfaces exposed to the fire.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	Wash skin or contaminated clothes with water.
6.1.2 For emergency responders	None specific.
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 measures 6.3.3 Non-recommended measures	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.
6.4 Reference to other sections	For personal protection see section 8. For disposal of waste, see section 13.

Section 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 are taken
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.

Section 8: Exposure controls/personal protection

8.1 Control parameters

National occupational exposure limits values, EH 40, 2005 with updates
No workplace exposure values for Linseed oil.

CAS-nr	Substance name	WEL 8 h	WEL 5 min	WEL 15 min
13463-67-7	Titanium dioxide Total inhalable respirable	 10 mg/m³ 4 mg/m³		
	Iron oxide, fume (as Fe)	5mg/m³		10 mg/m³
1317-65-3	Calcium carbonate Inhalable dust Respirable dust	 10 mg/m³ 4 mg/m³		

WEL=Workplace Exposure Limit

PNEC and DNEL/DMEL not established for Linseed oil.
Values below are from REACH registration of titanium dioxide

CAS-no	Substance	PNEC (type of environment)	DN(M)EL (route of exposure)	Expo-sure scen-ario annex
13463-67-7	Titanium dioxid	PNEC (aqua freshwater) 0,127 mg/L PNEC (aqua marine water) 1 mg/L PNEC aqua (intermittent releases) 0,61 mg/L PNEC STP 100 mg/L PNEC sediment (fresh water) 1000 mg/kg	Workers Longtime exposure local effect DNEL Inhalation 10 mg/m³ Consumers Longtime exposure systemic effect Oral DNEL 700 mg/kg bodyweight/day For other DNEL/DMEL data is missing	None

		Sediment dw PNEC sediment (marine water) 100 mg/kg sediment Dd PNEC soil 100 mg/kg dw		

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 when brushing. When spraying the product, use safety goggles.
Skin protection i) Hand protection (material, thickness, breakthrough time) ii) Other protection	i) None normally necessary. If prolonged contact with the product use gloves of eg. nitrile, PVC or butyl. ii) Normal working clothes. No special protection
Respiratory protection	If spraying the product and a hazard to surpass any occupational exposure value use a half mask with particle filter P2.
8.2.3 Environmental exposure control	Avoid large leakage to surface water or sewage system

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance/Form /State	Liquid
Odour	Characteristic Linseed oil.
pH	8.5-9
Melting point/freezing point	Appr. 0 °C
Initial boiling point and boiling range	Appr. 100 °C
Flash point	Not relevant.
Evaporation rate	Not determined
Flammability	Not flammable
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	1.3-1.7 kg/l depending on the colour.
Solubility	Linseed oil will only emulsify in water. Low water

	solubility <1 g/l. The product is partly soluble in several solvents, but it is not recommended to mix with organic solvents.
Partition coefficient n-octanol/water	Not determined for Linseed oil in the product. Probably > 3. Oleic acid that normally is a part of Linseed oil with 18-23 % has log Kow 7.7.
Decomposition temperature	Not determined
Viscosity	Not determined
Explosive properties	None
Oxidizing properties	None of the substances are classified as oxidising. Linseed olio can however have on oxidising effect in porous organic material if the water has evaporated.
VOC content	< 8 g/l

9.2 Other information

Emission Factor, Volatile organic compounds, TVOC	64 µg/(m^{2}xh) after 4 drying time of Linseed oil paint (white paint), 18 µg/(m^{2}xh) after 26 week drying time.

Section 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 and below +4 ºC
10.5 Incompatible materials	Strong acids, bases and oxidizing agents.
10.6 Hazardous decomposition products	None

Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
a) Acute toxicity
Short term exposure
Linseed oil LD50, rat > 15000 mg/kg body weight.
Ingestion: The product is probably a mild laxative and ingestion of small amounts will not give any symptoms
Inhalation: Linseed oil LC50 (4h) < 20 mg/l (IMO). Inhalation is only a risk when spraying the product. The product could in this case cause minor irritation to respiratory tracts.
Eye contact: Could cause mild transient irritation if contact with the eyes
Skin contact: Gives no effect on the skin
Long term exposure:
Ingestion: The product is probably a laxative, but adverse effects are not expected if occasional ingestion.
Inhalation: Not relevant except when spraying the product. The product consumes oxygen when drying and if the ventilation is insufficient during indoor painting there is a risk of headache.

Eye contact: Repeated exposure may cause irritation to the eyes, but will probably not give any remaining effect on the eye. Not eye irritating.
Skin contact: Repeated contact might dry the skin and cause irritation or atopic eczema, but during normal use the risk is low.
b) Skin corrosion/irritation: The product is not corrosive or irritating to the skin.
c) Serious eye damage/irritation:
The product will not give serious eye damage or eye irritation.
d) Respiratory or skin sensitisation: The product is not sensitizing. There is no known sensitizing effect of Linseed oil or other ingredient in the product. No studies is however found
e) Germ cell mutagenicity: No known effects.
f) Carcinogenicity: No known effects.
g) Reproductive toxicity: No known effects.
h) STOT-single exposure No known effects.
i) STOT-repeated exposures No known effects.
j) Aspiration hazard No known effects.
k)

11.2. Information on other hazards
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Section 12: Ecological information

12.1 Toxicity
Acute toxicity:
Linseed oil has low toxicity for aquatic organisms. Linseed oil 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 relative 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 waste water treatment plants.

12.2 Persistence and degradability
The product is easily degradable (DHI report). Studies in salt march sediments suggest also that the oil degrades.

12.3 Bioaccumulative potential
Linseed oil will not bioaccumulate. BCF < 10 (DHI report).

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. Endocrine disrupting properties
No ingredients in the product have any endocrine disruptor effect.

12.7. Other adverse effects
None known.

Section 13: Disposal consideration

13.1 Waste treatment methods	a) Emptied plastic package are sorted as hard plastic. The packaging material consists of polypropylene. The product can be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. b) There are no physical/chemical properties that may affect the waste treatment solutions. c) Larger residues should not be released to the sewage system. No special security measures concerning waste treatment methods are needed.
Waste codes (EWC)	Depends where the waste is produced, but suitable codes are 02 03 03, 20 01 28 or 08 01 14.
The product is classified as hazardous waste	No.
Waste codes (EWC) for the container	Suitable codes for the packages are 15 01 02 “Plastic packaging” or 20 01 39 “Plastics”.
A not thoroughly cleaned container is considered dangerous waste	No
Other information	See section 8 for personal protection equipment.

Section 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 Maritime transport in bulk according to IMO instruments	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 oils floating on water is also listed as IMO category 2. Vegetable oils pollution category Y, ship type 2.

Section 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. Chemical safety assessment is done for Titanium dioxide, but Allbäck has no access to this assessment.

Section 16: Other information

This SDS is changed in the following sections:
Headlines in some sections according to Regulation (EU) 2020/878.
Changes in section 2, 3 and 12. New classification of Titanium dioxide.

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

Eye Irrit. 2	Serious eye damage/eye irritation, Hazard Category 2
H319	Causes serious eye irritation.
Carc. 2	Carcinogenicity, Hazard Category 2
H351	Suspected of causing cancer when inhaled.
Repr. 2	Reproductive toxicity, Hazard Category 2
H361d	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	Hazardous to the aquatic environment — Chronic Hazard, Category 2
H411	Toxic to aquatic life with long lasting effects.

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.

Sources for data in this SDS

- Consequences of Linseed oil spills in salt marsh sediments.
  Pereira MG, Mudge SM, Latchford J. Mar Pollut Bull. 2002 Jun;44(6):520-33.
- 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.
- IMO INTERNATIONAL MARITIME ORGANIZATION. BLG WORKING GROUP ON THE EVALUATION OF SAFETY AND POLLUTION HAZARDS OF CHEMICALS. 30 September 2005, Linseed oil (containing less than 4% free fatty acids). Submitted by the United Kingdom.

Other information:
Linseed oil is exempted from registration according to REACH Annex V.
See regulation EC 987/2008.

The safety data sheet is based on the REACH regulation EC 1907/2006 and amendments.
Classification according to the CLP regulation EC 1272/2008.