SAFETY DATA SHEET

Issue date 30 Nov. 2007
Supersedes 22 Jun. 2006

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

Product name	**Linus wall paint**
Use	For outdoor and indoor painting. For painting on wood, concrete wallpaper and other materials.
Manufacture/responsible import within the EEA.	Allbäck Linoljeprodukter AB
Address	Östra Balkåkravägen 18 SE-271 91 Ystad Sweden
Phone	+46-(0)411-606 02
Fax	+46-(0)411- 602 41
e-mail	allback@allbackpaint.com
Contact	Sonja Allbäck
Emergency phone	The UK National Poisons Information Service 0121 507 4123 Birmingham, other times 112 or 999 Additional phone numbers could be found at: www.npis.org
Issued by	Ann Martens, Ramböll Sweden AB
Phone	+46-(0)40-10 54 47

2. HAZARDS IDENTIFICATION

Classification:
Not classified as hazardous for health or environment.
Most important hazards:
Because of the water content there is very little risk for spontaneous combustion if the product is absorbed by porous organic material, but large amount of the material could be soaked with additional water.

3. COMPOSITION/INFORMATION ON INGREDIENTS

EC-no	**CAS-no**	**Components name**	**Conc.** weight/weight	**Classification**	**Comments**
232-278-6	8001-26-1	Linseed oil	10-25 %	--	OEL
236-562-0	13434-24-7	Manganese drying agent (siccative) Content: Manganese bis(2-ethylhexanoate) 70-80% Naphtha, hydrogenated heavy	0,135 ml/litre paint	Xn, R22	-

		20-30%			
236-675-5	13463-67-7	Titan dioxide	7-20 %	--	OEL
215-279-6	13463-67-7	Chalk (Calcium carbonate)	35-45 %	--	--
		Water	25-30%		
		White – no extra pigment			
		Seamist – iron oxide		--	--
		Parchment - iron oxide		--	--
		Custard - iron oxide		--	--
		Barley White – iron oxide		--	--
		Peachy Pink – iron oxide		--	--
		Mocha Beige- iron oxide		--	--
		Grey Light – iron oxide		--	--
215-160-9	1308-38-9	Lime Tree Green – iron oxide chrome oxide		--	--
215-160-9	1308-38-9	Emerald Green – iron oxide chrome oxide		--	--
309-928-3	101357-30-6	Linseed Blue – iron oxide Lapis lazuli		--	--
		Russet Red – iron oxide		--	-- OEL
		Other colours are a mix of some of these colours and this will be declared on the package.		--	-- OEL

Explanation of abbreviations:
CAS-no = Chemical Abstracts Service; EU (Einecs- or Elincs number) = European inventory of Existing Commercial Chemical Substances or European LIst of Notified Chemical Substances.
Content given in either %, %weight/weight, %vol/weight, %vol/vol, mg/m^3, 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.

Comments: Substances are declared according to directive 99/45/EG and amendments.
Linseed oil contains mainly of natural triglycerides from oleic, linoleic, cetylic acid, linolenic acid and stearic acid.
Lapis Lazuli or Lazurite is a natural mineral of Silicic acid, aluminium sodium salt, sulfurized.
Iron oxide is either Fe_2O_3, Fe_3O_4 or $FeHO_2$ depending on the colour.
For risk phrases in full text see section 16.
The product contains 0.01-0.1% of quartz that is a natural part of the chalk. The amount of respirable quartz is very low.

4. FIRST AID MEASURES

Inhalation	Not relevant, except when spraying the product. Move to fresh air and rest if irritation occurs.
Skin contact	Wash the skin with soap or linseed oil soap and water.
Eye Contact	Remove contact lenses. Rinse the eyes for a couple of minutes. If symptoms persist, seek a physician.
Ingestion	Drink copious amount of milk or water. The product is a laxative in large amounts, but no risk for intoxication.
First aid equipment	Access to water for rinsing eyes at the working place.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Extinguish with foam, carbon dioxide, powder, water spray.
Extinguishing media which must not be used for safety reasons	Water jet.
Fire and explosion hazards	Very difficult to ignite because of the water content. Avoid smoke from the combustion.
Special protective equipment for fire-fighters	Wear self contained breathing apparatus for fire fighting if necessary.
Other information	Remove combustible material. Cool surfaces and containers exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Measurements for personal protection	Wash with soap or linseed oil soap and water.
Measurements for environmental protection.	The product will partly float on water and can be removed mechanically. Prevent discharge in the sewage system.
Methods for cleaning up.	Make embankments with sand, soil or similar and collect. Small amounts could be washed away with water. The product is not hazardous waste and is easily biodegradable in nature.
Not suitable cleaning methods.	If organic fibrous material is used for cleaning the material should be soaked in water.
Measurement when accident during transport. ADR	Switch of the motor. Keep away ignition sources. Make embankments as above.

7. HANDLING AND STORAGE

Handling	Be aware of fire hazard in porous organic materials. Immerse rags in water.
Storage	Store at room temperature. Keep away from children.
Preventing action	None
Specific use	See point 1

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Occupational Exposure Limits, EH40 2005.

EU-no	CAS-no	Substance name	OES 8 h	MEL 5 min	OES 15 min	Year
		Oil mist	3 mg/m^3	-	3 mg/m^3	1990 Swedish value
		Oil mist	5 mg/m^3	-	10 mg/m^3 (10 min.)	UK value
236-675-5	13463-67-7	Titanium dioxide total inhalable respirable	10 mg/m^3 4 mg/m^3	-	-	UK value
215-160-9	1308-38-9	Chromium III compounds (as Cr)	0.5 mg/m^3	-		UK Value
215-168-2	1309-37-1	Iron oxide Fume (as Fe)	5 mg/m^3	-	10 mg/m^3	UK Value

The UK value is only for mineral oil, but the Swedish value is for all kind of oils. It is however wise not to exceed the OES value, even if there is no mineral oil in this product.
is no mineral oil in this product.
The value for iron oxide and chrome oxide is only relevant when grinding the dried product.
The CAS number for iron oxide has not been declared because the type of iron oxide could vary in the different colours.
The occupational exposure value for quartz is not relevant for this product.

Recommended monitoring procedures	None
Technical Measures/ Precautions	Good ventilation during painting. The product demands oxygen when drying and therefore air thoroughly.
Respiratory protection	None when painting. If polishing or grinding dried product a dust mask could be used. If occupational exposure value is surpassed use half mask with particle filter P2 and filter A.
Hand protection Material/Permeation time	None
Eye protection	None
Skin protection	Normal working clothes. No special protection

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/State of aggregation	Liquid
Colour	Light brown
Odour	Linseed

Density	Appr. 1. kg/l. Depending on the colour.
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.
Partition coefficient n-octanol/water	Floats on water
VOC content	<5 g/l
Emission factor, Total volatile organic compounds, TVOC	64 µg/(m^2xh) after 4 week of drying time of linseed oil paint (pure linseed oil is not tested). 18 µg/(m^2xh) after 26 weeks of drying time oil paint.

10. STABILITY AND REACTIVITY

Conditions to avoid	Do not store above room temperature and not below 4°C
Material to avoid	Strong acids, bases and oxidizing agents. It reacts violently with hypochlorite. Colours with chrome should not be treated with strong bases like sodium hydroxide.
Hazardous decomposition products	Chrome oxide decomposes to chromate when heated e.g. at fire. Chromate ions are carcinogenic and sensitizers.
Stability	Stable at normal storage conditions

11. TOXICOLOGICAL INFORMATION

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 siccative in boiled linseed oil and added pigments makes it however unsuitable to ingest.
Inhalation: Only a risk when spraying the product. The product could cause irritation if occupational exposure limit for oil mist is surpassed. 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 out 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 effect of the product.
Titanium dioxide has given benign tumours in rats when inhaled. In female rats it has also given cancer tumours on the lungs. Titanium oxide is under evaluation by IARC. In the monograph 47 it is classified as group 3 (The agent is not classifiable as to its carcinogenicity to humans). Monograph 93 is under evaluation and IARC has now classified titanium dioxide as group 2B. The agent is possibly carcinogenic to humans. When titanium oxide is dispersed in linseed oil, like in this product, there is no risk of inhaling titanium dioxide (unless dried product is grinded).
Reproductive toxicity: None known.
Mutagenic effects: None known.

12. ECOLOGICAL INFORMATION

Acute toxicity for aquatic organisms (OECD): The product is not toxic to aquatic organisms.
Persistency and biodegradation: The linseed oil is easily biodegradable.
Bioaccumulation: The product will not bioaccumulate.

PBT Assessment: The product is not estimated to contain any PBT or vPvB substance.

13. DISPOSAL CONSIDERATIONS

Waste code EWC	Depends where the waste is produced, but suitable codes are 02 02 03, 20 01 28 or 08 01 13.
The product is hazardous waste	No
Package disposal	Can be sorted as metal if properly cleaned.
Suitable disposal measurements	Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

14. TRANSPORT INFORMATION

General	Not classified as hazardous goods

15. REGULATORY INFORMATION

Labelling Symbols: No hazard label required.

Classification: Not classified as hazardous for health or environment.

Labelling package:
"Safety data sheet for professional users available upon request"

Interior matt walls and ceilings (Gloss <25@60°), water based, VOC content < 5 g/l.
EC-limit from 2007, 75 g/l and from 2010, 30 g/l.

16. OTHER INFORMATION

This MSDS is changed in the following sections:
MSDS changed according to REACH regulation, e.g. Section 2 and 3.
Also changes in other sections, because of removal of zinc oxide from the colours.
Changes also made because of the entry in force of the VOC directive 2004/42/EC.

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. VOC content declared for the colour with the highest content of linseed oil (white).

R-phrases from section 3:
Manganese bis(2-ethylhexanoate)
R22 Harmful if swallowed.

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/)
Riskline database, http://apps.kemi.se/riskline/index.htm

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 47, Some Organic Solvents, Resin Monomers and Related Compounds, Pigments and Occupational Exposures in Paint Manufacture and Painting, 13 April 1999.

Other information:
The safety data sheet is based on Annex II of the REACH regulation 1907/2006/EC and other appropriate directives for classification and labelling like 67/548/EEC and 1999/45/EC.