

1. Name of product and company

Product name: **Solvent-free linseed oil paint**
Item number:
Use: See also under point 16

Manufacturer/ supplier: ALLBÄCK LINOLJEPRODUKTER AB
Retailer:
Address: Bjäresjö Skola 271 91 Ystad

Tel: +46 411- 602 02
Fax: +46 411- 602 41

Tel. advice:
Tel. emergency: The UK National Poisons Information Service
tel.no. (0870) 600 62 66, other times 112 or 999

2 Summary / classification of substances

When classifying preparations based on the classification of component substances, the method of calculation should take into account all ingoing substances that are hazardous to health to be found in a concentration (weight/weight percent) equal to or above:

- 0.1% for substances that are classified as highly toxic or toxic
- 1% for substances that are classified as hazardous to health, caustic or irritant according to KIFS 2001:4

Substances	CAS no.	EEC no.	Content	Warning symbol	Risk description
Linseed oil <i>Contained in linseed oil:</i>	8001-26-1		35-55%		
Drying agent; manganese drier (manganese carboxylate) Pigment depending on paint (see below) Paint Holkham Green			0.135 ml/litre paint 40-60%		
Pigment <i>Iron oxide</i> <i>Chromic oxide</i> <i>Chalk</i>	1308-38-9				

Key warning symbols: Tx = highly toxic, T = toxic, C = caustic, Xn = hazardous to health, Xi = irritant, V = moderately hazardous to health, E = explosive, O = oxidizing, Fx = highly flammable, F = flammable and N = hazardous to the environment. No information means that the ingredient is not classified as hazardous for environment and health.

3 Dangerous properties

When linseed oil is heated it breaks down into toxic fumes of carbon monoxide and carbon dioxide.

Health risks:

Environmental risks: Prevent discharge to sewage and surface water

Fire hazards: Risk for self-ignition of saturated paper, cotton cleaning material, rags etc.

Physical / chemical risks: Weakly oxidizing, ages rubber, plastic etc. Reacts violently with chlorine but otherwise not particularly reactive.

4 First aid

Inhalation:	Not relevant
Skin contact:	Remove splashed clothing. Wash the skin with soap and a lot of water. If irritation occurs consult a doctor.
Eye contact:	First remove contact lenses if worn. Rinse with physical saline solution (Approx. 0.9% saline solution) for 20-30 minutes. Contact a doctor if discomfort persists.
Swallowing:	If large amounts have been swallowed go directly to hospital.

Information to a doctor:

5 In case of fire

Can be extinguished with powder, foam, carbon dioxide or water mist. Avoid inhalation of fumes. Containers close to a fire should be moved or cooled with water. Self-ignites at 343°C.

6 In case of spillage / accidental discharge

ALWAYS START BY REMOVING ALL SOURCES THAT COULD IGNITE THE OIL!

Personal protection:	Wash with soap and water
Measures to protect the environment:	Prevent discharge into sewage outlets. Soak up the paint with some absorbent, non-combustible material e.g. sand, earth or the like. Place in a tightly-closed container and dispose of as hazardous waste.
Decontamination:	Place in a tightly-closed container and dispose of as hazardous waste.

7 Handling and storage

Should be stored in container with a tightly-closed lid. Material, paper, cotton cleaning material and the like that has come into contact with the paint should be soaked in water and stored in a tightly-closed container.

8 Limitation of exposure / personal protection

Personal protective equipment: Rubber gloves should be used

9 Physical and chemical properties

For linseed oil

Molecular weight:	Not available but molecular weight is high
Appearance:	Varies depending on pigment
Smell:	Linseed oil
Concentration:	
pH:	
Boiling point / boiling point interval:	343°C
Melting point / melting point interval:	-19°C
Flash point:	222 °C
Combustibility (fast, gas):	
Ignition temperature:	
Explosive properties:	
Explosion limits:	
Oxidizing properties:	Weakly oxidizing
Steam pressure:	
Relative density:	
Solubility in water:	Insoluble in water, < 1 mg/mL 20°C
Solubility in organic solvents (to be specified):	Data refer to linseed oil DMSO: ≥ 100 mg/mL 20°C ethanol (95%): < 1 mg/mL 20°C methanol: no data acetone: ≥ 100 mg/mL 20°C toluene: no data alcohol: somewhat soluble benzene ether: can be mixed oils: can be mixed turpentine: can be mixed dehydrogenated alcohol: 1 in 40 Benzene : can be mixed
Distribution coefficient in n-octanol/water:	
Other information:	Floats on water

10 Stability and reactivity

Linseed oil reacts violently with chlorine. Linseed oil polymerises on contact with air. When exposed to air, thickens gradually, becomes darker and smell and taste become more distinctive. Linseed oil in cotton cleaning material can self-ignite. Chromic oxide breaks down into hexavalent chrome (chromate) when strongly heated. This is allergenic and carcinogenic.

11 Toxicological information

Inhalation:	Linseed oil consumes oxygen when it dries. You should therefore frequently air premises that have been treated with large amounts of linseed oil, otherwise headaches may result. Chromic oxide dust is hazardous to inhale but exposure seems unlikely.
Skin contact:	Can give rise to allergies and irritate skin.

Eye contact:	Splashes in the eyes can cause stinging, irritation.
Ingestion:	Can give rise to nausea, stomach pain, vomiting and diarrhoea if swallowed.
Other:	Do not remove paint containing chromic oxide with lye, as the chromic oxide will dissolve in water and become allergenic. Products that contain chromic dioxide should not be handled by people who are oversensitive to chrome.

12 Eco-toxicological information

Eco-toxicity: Chromic oxide

Acute fish toxicity:

LC0 (Brachydanio rerio); >10 000mg/l 96H test time

Acute bacterial toxicity.

No harmful effects in respect of Pseudomonas fluorescens at 10 000mg/l

No harmful effects in respect of Echerichia coli at 1000mg/l

Chromic oxide bio-accumulates in aquatic organisms.

Chromic oxide is normally insoluble in water but can become water soluble if exposed to basic substances. Consequently, do not remove paint with lye on surfaces painted with paints containing chrome, since the chromic oxide then becomes water-soluble. Chromic oxide must not be exposed to strong heat, since it is then converted to chromate that is allergenic and carcinogenic and highly toxic to aquatic organisms.

13 Waste management

Should be treated as hazardous waste. Oily rags, cotton cleaning material etc. should be soaked in water and placed in a tightly-closed container. Timber painted with the paint is considered as hazardous waste.

Empty dry packaging is not hazardous waste. See Ordinance (SFS 2001:1063) concerning hazardous waste.

14 Transportation

Not assessed.

15 Current regulations

Substances	Example of synonyms	Class	Labelling
chromic oxide	Chromic(III)oxide		

16 Other information

Sources:

Lewis, R.J. (1992) Sax Dangerous Properties of Industrial Materials, 8th ed., Van Nostrand Reinhold New York

Clayton, G.D., Clayton F.E. (1981) Pattys Industrial Hygiene and Toxicology, 3rd rev. Ed, John Wiley & sons, New York

Fregert, S., Björkner B., Bruze M., Dahlquist I., Gruvberger B., Persson K., Trulsson L., (1990) Yrkesdermatologi, Studentlitteratur Lund

Scorecard, Environmental Defence Fund
<http://www.scorecard.org/>

Kemikalieinspektioens website
<http://www.kemi.se>

National Institute for Occupational Safety and Health (NIOSH)
<http://www.cdc.gov/niosh/ipcs/nicstart.html>

Chemfinder
<http://www.chemfinder.com>

NTP CHEMICAL REPOSITORY
http://ntp-db.niehs.nih.gov/NTP_Reports/NTP_Chem_H&S/NTP_Chem8/Radian8001-26-1.txt

Classification of chrome compounds:

European Commission Working Group on the Classification and Labelling of Dangerous Substances, 1994: Summary Record Environmental Effects. Meeting at ECB Ispra, 13-14 December 1994.
<http://www.kemi.se/nclass>

Hazardous Substances Databank: Chromic oxide
<http://toxnet.nlm.nih.gov/cgi-bin/sis/search>