

Material Safety Data Sheet

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Infosafe No™ AE081

Issue Date : July 2013

ISSUED by AMTRADE

Product Name **LINSEED OIL - BOILED GRADES**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name LINSEED OIL - BOILED GRADES

Company Name Amtrade International Pty Ltd (ABN 49 006 409 936)

Address Level 6, 574 St Kilda Road
Melbourne
VIC. 3004 Australia

Emergency Tel. 1800 033 111 Aust

Telephone/Fax Number Tel: 61 3 9229 9229
Fax: 61 3 9229 9290

Email library@amtrade.com.au

Recommended Use Timber preservation, ready mixed paints, and protective (primer) coatings for steelwork.

Other Names	Name	Product Code
	Linseed Oil Boiled LF 190kg	321290
	Linseed Oil Extra Pale Boiled 190kg	321291
	Linseed Oil Pale Boiled 190kg	321296
	o	
	Oxidized Triglyceride Vegetable Oil; Oxidized Fatty Acid Mixture; Oxidized Linseed Oil with Drier Additives; Boiled Linseed Oil with Drier Additives.	
	o	
	Combustible Liquid C2, AS1940 for Storage & Handling.	
	o	

2. HAZARDS IDENTIFICATION

Hazard Classification Not Dangerous Goods, nor Workplace Hazardous Substance, nor Scheduled Poison.
Not classified as a GHS Hazardous Chemical in Australia.

However: An AS1940 COMBUSTIBLE LIQUID C2,
& Danger of spontaneous combustion if contaminated cloths are left uncleaned.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization Liquid

Ingredients	Name	CAS	Proportion
		68649-95-6	>99%
		CAS-ON-AICS*	<1%

Other Information A naturally occurring Triglyceride vegetable oil, having a variable Fatty Acid Distribution:

C16	Palmitic	5-7%	
C16:1	Palmitoleic	Trace	
C18:0	Stearic	3-6%	
C18:1	Oleic	15-35%	
C18:2	Linoleic	15-20%	
C18:3	Linolenic	35-60% Pale & EP Boiled,	45-60% Boiled

Each of these boiled Linseed Oils contains small quantities of metal soaps that act as drying agents: Metal Content <0.1%. Note: All are Lead free.

They may contain [Cobalt, Calcium, Manganese, Iron & Strontium: Carboxylate Driers].

Additions of these metal containing additives alters the drying properties.

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4. FIRST AID MEASURES

Inhalation	Remove to fresh air.
Ingestion	If swallowed give 1-2 glasses of water to drink and seek medical advice, as these oils contains metal drier additives (Metal <0.2%) that may have harmful effects due to these trace additives.
Skin	Wash with soap and water.
Eye	Flush eye immediately with water. Seek medical advice.
First Aid Facilities	Normal wash room facilities with soap and water, eye wash and showers.
Advice to Doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Fire Fighting Measures	Combustible Liquid C2 to AS1940 (flash point 200-250°C). Not readily combustible at <100°C. Will burn in fire conditions, evolving fierce heat and dense acrid smoke. Inform the Fire Brigade they are dealing with a 'chip shop type fire'. EXTINGUISHING MEDIA: Dry powder, carbon dioxide, foam. Never use water because the water may boil explosively and/or float the burning oil and significantly spread the fire. SPECIAL HAZARDS: Avoid breathing the smoke and fumes which are acrid and irritating to eyes and nose. The smoke may contain Acrolein which is toxic. PROTECTIVE EQUIPMENT: Wear self contained breathing apparatus.
Decomposition Temp.	Boiled: >100°C; Pale: >200°C (start decomposing)

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	SPILLAGE: Linseed Oil is relatively harmless from a health hazard point of view. IF it contains Cobalt Drier (<1%) it may cause environmental effects. Contain spill with sand, earth or non combustible absorbent. Warn of the danger of slippery surfaces. Ensure the floor is properly cleaned afterwards with hot water and detergent. In extreme cases use Sodium Carbonate solution. Any remaining Linseed Oil will dry to a hard film in a few hours. Prevent the Linseed Oil from entering drains, surface or ground water. Any absorbent material not to be cleaned immediately should sprayed with water to reduce the risk of overheating.
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7. HANDLING AND STORAGE

Handling and Storage	HANDLING: Avoid unnecessary skin contact. Wear heat protective non-absorbent gloves, apron and safety glasses with side shields (or full face shield) if handling hot oil. Do not breathe mists or hot fumes. When handling oils heated over 100°C (Boiled) or over 200°C (Pale Boiled) ensure good ventilation. STORAGE: Store away from cloth that may become contaminated in the event of a spill and lead to spontaneous combustion. Prevent water contact as this may turn the oil cloudy. Protect from cold temperatures, as some precipitation of natural fats may occur and make the oil hazy. These fats re-dissolve on heating. Do not store the oil in Copper or Copper containing alloy (e.g. brass) vessels, as it may turn the oil green due to the reaction of the Fatty Acid and the Copper. A slight increase in viscosity may occur on storage. Combustible Liquid C2 to AS1940. Stored in accordance with AS1940 Storage & Handling of Flammable & Combustible Liquids.
Other Information	DANGER OF SPONTANEOUS COMBUSTION: After use, any linseed oil contaminated cloths or rags should ideally be

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burnt, if this is not possible, they should be washed with warm soapy water. Even after washing, the rags must never be left crumpled into a ball, but spread out and disposed of. Cotton cloths especially increase the chance of spontaneous combustion. Brushes and rollers should be cleaned with White Spirit and then washed in warm soapy water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards No specific exposure standard has been established by Safe Work Australia (formerly the ASCC, formerly NOHSC).

All atmospheric contamination should be kept to as low a level as is practically possible.

If a mist is formed use:
Oil Mist (Refined mineral) 5 mg/m3 (TWA)

Engineering Controls No special engineering precautions required, except ventilation may be required for handling hot oil. Danger of slippery surfaces when spilt. Danger of spontaneous combustion if cloths or rags used to cleanup the spill are left crumpled up in a bin (this works like a compost heap).

Personal Protective Equipment RESPIRATORY PROTECTION: None required at normal room temperature. When handling oils heated over 100°C ensure good ventilation.

HAND PROTECTION: None normally required, if handling daily wear non-absorbent gloves.

EYE PROTECTION: None required unless handling hot oil when safety glasses are mandatory, and ideally a full face shield should be worn.

SKIN PROTECTION: Wear sensible, regularly laundered overalls. If handling hot oils the use of a non-absorbent apron is advised.

Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

Appearance Reddish orange to yellow brown oily liquids.

Decomposition Temperature Boiled: >100°C; Pale: >200°C (start decomposing)

Melting Point Does not have a definite melting point.

Boiling Point Starts Decomposing: Boiled >100°C Pales >200°C

Specific Gravity 0.940 - 0.946 at 20°C

Vapour Pressure Not measurable at 20°C

Flash Point 200-250°C (Closed Cup)

Flammability Combustible liquid C2 to AS1940 (Flash Point 200-250°C).
Not readily combustible at <100°C.
Will burn in fire conditions, especially if absorbed onto porous material, when it will burn with a fierce heat & form large amounts of dense acrid smoke.

Auto-Ignition Temperature 350°C

Flammable Limits - Lower Not available

Other Information SOLUBILITY: Insoluble in water. Soluble in most Hydrocarbons, Ketones, Aromatic Ethers, Chlorinated solvents.

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VISCOSITY : 1-5 Poise at 25°C
DRYING TIME: approx. 15 hours maximum at 20°C.

10. STABILITY AND REACTIVITY

Stability and Reactivity Linseed Oil is a very stable and relatively unreactive (by itself). There may be a colour change if exposed to sunlight for a few days, this is due to the natural Carotenoids and other components in trace quantities, bleaching due to the action of light.

HAZARDOUS REACTIONS: There is a danger of spontaneous combustion if absorbed onto very fine clay, cloths and rags - particularly cotton. Contaminated cloths and rags left crumpled are spontaneously combustible.

INCOMPATIBLE MATERIALS: Cloth, rags, sawdust, paper.
The fatty acids react with copper and its alloys and cause the oil to become coloured green.

HAZARDOUS DECOMPOSITION PRODUCTS: If heated over 200°C it will decompose to give a complex mixture of Aldehydes, Lactones and Ketones, notably Acrolein.

HAZARDOUS POLYMERISATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information Boiled Linseed Oil has not been subject to any form of animal testing.

They may contain [Cobalt, Calcium, Manganese, Iron & Strontium: Carboxylate Driers]. For the purpose of possible hazards it is assumed that a Cobalt Carboxylate drier is used.

Assumed it contains Cobalt Carboxylate drier additive at <1%.

At >1% Cobalt Carboxylate is classified at R43 - May cause sensitisation by skin contact.
At <1% this product 'May produce an allergic reaction'.

Inhalation Does not evolve fumes at room temperature. Above 100°C fumes may cause slight irritation. At higher temperatures, fumes are may become irritating, particularly above 200°C.

Ingestion Not considered harmful. However the <1% drier additive may become harmful if sufficient quantities are swallowed (this is very unlikely).

Skin May cause slight skin irritation.

Eye May cause slight eye irritation. No long term damage is likely.

Chronic Effects Prolonged skin contact may cause reddening, rashes and ultimately dermatitis, especially on sensitive skin.

12. ECOLOGICAL INFORMATION

Ecological Information Not expected to be harmful to aquatic organisms. Avoid contaminating waterways.

The Linseed Oil ingredient is expected to be completely biodegradable.
NOTE: May contain trace levels of Cobalt at <0.2% (an environmentally toxic metal) drier additive, which at <0.2% Cobalt is not expected to cause an environmental hazard.

LINSEED OIL (as 100%):
FISH TOXICITY: No data, but it is not expected to be harmful.
BACTERIAL TOXICITY: No data, but it is not expected to be harmful.
BIODEGRADATION: No data, but it is expected to be completely biodegradable.

13. DISPOSAL CONSIDERATIONS

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Disposal Considerations DISPOSAL: In accordance with Local, State & Federal EPA waste regulations. Advise the hazard of spontaneous combustion with combustible absorbents. Advise it may contain Cobalt Carboxylate <1% (Cobalt <0.2%) which may product an allergic reaction and may cause harmful environmental effects.

There is a Danger of Spontaneous Combustion if cloths or rags are used to clean up a spill and then left crumpled and uncleaned following the spill. Ideally contaminated cloths should be burnt immediately. If this is not possible, they should be washed with warm soapy water. Even after washing, the rags must never be left crumpled into a ball, but spread out and disposed of. Cotton cloths especially increase the chance of spontaneous combustion.

Normally suitable for careful incineration or reaction by an approved facility.

14. TRANSPORT INFORMATION

Transport Information NOT defined as Dangerous Goods by the Australian Code for the Transport of Dangerous Goods by Road & Rail; by the IATA Air Transport Dangerous Goods Regulations; or by the IMDG (International Maritime Dangerous Goods) Code.

15. REGULATORY INFORMATION

Poisons Schedule Not Scheduled

Packaging & Labelling Not Dangerous Goods, nor Workplace Hazardous Substance, nor Scheduled Poison. Not classified as a GHS Hazardous Chemical in Australia.

However: An AS1940 COMBUSTIBLE LIQUID C2, & Danger of spontaneous combustion if contaminated cloths are left uncleaned.

AICS (Australia) All ingredients are on the Australian Inventory of Chemical Substances.

UK Legislation Library@Amtrade.com.au

16. OTHER INFORMATION

Contact Person/Point For EMERGENCIES ONLY Contact : 1800 033 111 (All Hours Australia)
+61-3-9663-2130 (Australia - at Sea)

0800 734 607 (All Hours New Zealand)
+64-4-473-4607 (New Zealand - at Sea)

Amtrade International Pty Ltd: 61 3 9229 9229 (Melbourne)
61 2 9805 4200 (Sydney)
Amtrade New Zealand Limited : 64 9 579 6767 (Auckland)

NOTE: This MSDS summarises our best knowledge of the health and safety hazard information on the product, and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company, or in the event of an emergency, the Emergency Response number above.

Our responsibility for products sold is subject to our standard terms and conditions, a copy is sent to our customers and is also available on request.

User Codes

<u>User Field Title</u>	<u>User Code</u>
Authorised by	J.Simpson
Prepared by	JS130726

Other Information Key Changes: GHS format SDS. General review. Minor changes throughout the SDS. Added: if Cobalt Carboxylate Drier Additive is present is may produce an allergic reactions & may cause an environmental hazard.

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