

# BROUNS & CO

LINSEED OIL AND PAINT

**Lime Stuff**  01794 884294  
Traditional breathable building & decorating products  
www.limestuff.co.uk info@limestuff.co.uk

## TURPENTINE OIL

### SAFETY DATA SHEET

Safety data sheet according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

#### **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

##### **1.1. Product identifier:**

Trade Name:	Turpentine Oil
REACH registration No:	01-2119553060-53-xxxx
	Information about product identifiers:
	EC-number (formerly): 232-350-7
CAS-Number:	CAS-Number (formerly): 8006-64-2
EC-number:	932-349-8
EU-number:	650-002-00-6

##### **1.2. Relevant identified uses of the substance or mixture and uses advised against:**

General use: Essential oil for pharmaceutical industry Identified uses:

##### **Industrial:**

- Use as an intermediate
- Formulation & (re)packing of substances and mixtures
- Distribution of substance
- Formulation of fragranced products
- Use of fragranced products
- Formulation of coatings and inks
- Industrial application of coatings and inks
- Ancillary activities in application of coatings (chemical strippers)
- Formulation of solvents
- Use as a solvent
- Use of adhesives and sealants Professional:
- Formulation of fragranced products
- Use of fragranced products
- Professional application of coatings and inks
- Ancillary activities in application of coatings (chemical strippers)
- Use as a solvent
- Use of adhesives and sealants Consumer:
- Use of fragranced products
- Application of coatings and inks
- Ancillary activities in application of coatings (chemical strippers)

- Use as a solvent
- Use of adhesives and sealants
- Uses advised against: None known

**1.3. Details of the supplier of the safety data sheet:**

Brouns & Co  
Highfield  
Selby Road  
Leeds  
LS25 2AG

Telephone: +44 (0) 1423 500694

Responsible person for the safety data sheet (e-mail): sales@linseedpaint.com

**1.4. Emergency telephone number:**

NHS Non-emergency (England or Scotland): 111 or (Wales) 0845 4647. For USA 911.

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Classification according to EC regulation 1272/2008 (CLP):

Flam. Liq. 3;	H226	Flammable liquid and vapour.
Acute Tox. 4;	H302	Harmful if swallowed.
Acute Tox. 4;	H312	Harmful in contact with skin.
Acute Tox. 4;	H332	Harmful if inhaled.
Skin Irrit. 2;	H315	Causes skin irritation.
Eye Irrit. 2;	H319	Causes serious eye irritation.
Skin Sens. IB;	H317	May cause an allergic skin reaction.
Asp. Tox. 1;	H304	May be fatal if swallowed and enters airways.

**2.2. Label elements:**



Signal word: **Danger**

Hazard Statements:	H226	Flammable liquid and vapour.
	H302	Harmful if swallowed.
	H304	May be fatal if swallowed and enters airways.
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H411	Toxic to aquatic life with long lasting effects.
Safety Precautions:	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P261	Avoid breathing mist/vapours.

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water/soap.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P331	Do NOT induce vomiting.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container to hazardous or special waste collection point.

## 2.2. Other hazards:

No risks worthy of mention

Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

Chemical characterization:	Turpentine, oil (Pinus pinaster) = Gum turpentine oil
CAS-Number:	-
EC-number:	932-349-8
EU-number:	650-002-00-6

## **SECTION 4: First-aid measures**

### 4.1. Description of first aid measures:

General information:

Take off immediately all contaminated clothing.

In case of inhalation:

Provide fresh air. Seek medical treatment in case of troubles, If victim is at risk of losing consciousness, position and transport on their side.

Following skin contact:

After contact with skin, wash immediately with soap and plenty of water. In case of skin irritation, consult a physician.

After eye contact:

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.

Subsequently consult an ophthalmologist.

After swallowing:

Do NOT induce vomiting, Danger of aspiration! Immediately get medical attention. If swallowed, rinse mouth with water (only if the person is conscious)

### 4.2. Most important symptoms and effects, both acute and delayed:

May be fatal if swallowed and enters airways. Harmful. Irritant. May cause an allergic skin reaction.

**4.3. Indication of any immediate medical attention and special treatment needed:**

Treat symptomatically.

**SECTION 5: Fire-fighting measures**

**5.1. Extinguishing media:**

Suitable extinguishing media:

Foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

**5.2. Special hazards arising from the substance or mixture:**

Flammable liquid and vapour. Can form a highly explosive mixture with air. In case of fire may be liberated:

Organic crack products and carbon oxides.

**5.3. Advice for firefighters:**

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

Additional information:

Hazchem-Code: 3Y

Use fine water spray to cool endangered containers.

Heating causes rise in pressure with risk of bursting.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures:**

Provide adequate ventilation. Do not breathe vapours. Suitable protective clothing. Avoid contact with the substance. Keep unprotected people away

**6.2. Environmental precautions:**

Do not allow to penetrate into soil, waterbodies or drains.

**6.3. Methods and material for containment and cleaning up:**

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information:

Remove all sources of ignition. Use only non-sparking tools.

**6.4. Reference to other sections:**

Refer additionally to chapter 8 and 13.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling:**

Advices on safe handling: Wear suitable protective clothing. Avoid contact with skin and eyes. Do not breathe vapour. Provide adequate ventilation.

Precautions against fire and explosion:

Avoid open flames. Keep away from sources of ignition. – No smoking.

Take precautionary measures against static discharges. Use only explosion-proof equipment. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

### **7.2. Conditions for safe storage, including any incompatibilities:**

Requirements for storerooms and containers:

Store in well-filled containers, protected from light. Keep container dry. Keep container tightly closed in a cool, well-ventilated place. Provide solvent resistant flooring.

Hints on joint storage: keep away from strong oxidizing agents and strong acids.

Further details: Store in areas not accessible to outsiders. Unsuitable materials: May attack plastics.

### **7.3. Specific end use(s):**

No information available.

## **SECTION 8: Exposure controls/Personal protection**

### **8.1. Control parameters:**

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
76-22-2	Turpentine Oil	Great Britain: WEL-STEL	850 mg/m <sup>3</sup> ; 150 ppm
		Great Britain: WEL-TWA	566 mg/m <sup>3</sup> ; 100 ppm
		Ireland: 15 minutes	840 mg/m <sup>3</sup> ; 150 ppm
		Ireland: 8 hours	112 mg/m <sup>3</sup> ; 20 ppm
	Bornan-2-one	Ireland: 15 minutes	18 mg/m <sup>3</sup> ; 3 ppm
		Ireland: 8 hours	12 mg/m <sup>3</sup> ; 2 ppm

DNEL/DMEL:

DNEL short-term, workers, dermal: 161 µg/cm<sup>2</sup>

DNEL long-term, workers, inhalative: 5,98 mg/m<sup>3</sup>

DNEL short-term, consumers, dermal: 81 µg/cm<sup>2</sup>

DNEL long-term, consumers, oral: 0,31 mg/kg bw/d

DNEL long-term, consumers, inhalative: 1,06 mg/m<sup>3</sup>

PNEC:

PNEC water (freshwater): 8,8 µg/L

PNEC water (marine water): 0,88 µg/L

PNEC sediment (freshwater): 2,27 mg/kg dw

PNEC sediment (marine water): 0,227 mg/kg dw

PNEC soil: 0,45 mg/kg dwt

PNEC sewage treatment plant: 6,6 mg/L

PNEC oral (Secondary Poisoning): 1,35 mg/kg feed

## 8.2. Exposure controls:

Provide adequate ventilation.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection: Recommendation:

Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection:

Protective gloves according to EN 374.

Glove material: Nitrile rubber

Layer thickness: 0,11 mm.

Breakthrough time: > 480 min.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection:

Tightly sealed goggles according to EN 166,

Body protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Do not breathe vapours.

Avoid contact with skin and eyes.

Take off immediately all contaminated clothing.

When using do not eat, drink or smoke.

Wash hands before breaks and after work.

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties:

Appearance:	Form: liquid
Odour:	Colour: clear, colourless
Odour threshold:	characteristic, Turpentine
pH value:	no data available
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	-60 °C
Flash point/flash point range:	154 - 170 °C
Evaporation rate:	34 °C (ASTM D 3828-97)
Flammability:	no data available
Explosion limits:	LEL (Lower Explosion Limit): 0.70 Vol-%
	UEL (Upper Explosive Limit): 6.10 Vol-%
Vapour pressure:	at 20 °C: 5.19 hPa
Vapour density:	no data available
Density:	at 20 °C: 0.867 g/mL (OECD 109)
Water solubility:	at 20 °C: 25.5 mg/L (OECD 105)
Partition coefficient: n-octanol/water:	at 25 °C: 4.49 logP(o/w) (OECD 117)
	Based on the n-octanol/water partition coefficient accumulation in organisms is possible.
Auto-ignition temperature:	255 °C (1013 hPa)
Decomposition temperature:	No data available
Viscosity, dynamic:	at 25 °C: 1.3 mPa*s
Explosive properties:	No data available
Oxidizing characteristics:	No data available

9.2. Other information: None relevant

Ignition temperature: approx. 220 °C  
Additional information: Speed of vaporization/evaporation rate: 21,6 (ether = 1)

**SECTION 10: Stability and reactivity**

10.1. Reactivity: Flammable liquid and vapour.

10.2. Chemical stability: Product is stable under normal storage conditions..

10.3. Possibility of hazardous reactions:

Can form a highly explosive mixture with air. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid: Avoid open flames. Keep away from sources of ignition. Avoid Excessive heating

10.5. Incompatible materials:

Keep away from strong oxidizing agents and strong acids.

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

10.6. Hazardous decomposition products:

In case of fire may be liberated: Organic crack products and carbon oxides.

Thermal decomposition: no data available

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects:

Acute toxicity:

LD50 Rat, oral: 3956 mg/kg  
LC50 Rat, inhalative: (OECD 403) 13.7 mg/L/4h  
LC50 Mouse, inhalative: (OECD 403) 29 mg/L/2h >  
LD50 Rabbit, dermal: >2000 mg/kg

Toxicological effects:

Acute toxicity (oral): Acute Tox. 4;

Acute toxicity (dermal): Acute Tox. 4;

Acute toxicity (inhalative): Acute Tox. 4;

Skin corrosion/irritation: Skin Irrit. 2;

Eye damage/irritation: Eye Irrit. 2;

Sensitisation to the respiratory tract:

Skin sensitisation: Skin Sens. IB;

Germ cell mutagenicity/Genotoxicity:

Carcinogenicity:

Reproductive toxicity:

Effects on or via lactation:

Specific target organ toxicity (single exposure):

Specific target organ toxicity (repeated exposure):

Aspiration hazard: Asp. Tox. 1;

H302 = Harmful if swallowed,

H312 = Harmful in contact with skin.

H332 = Harmful if inhaled.

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

Lack of data.

H317 = May cause an allergic skin reaction.

Lack of data.

Lack of data.

Lack of data.

Lack of data.

Lack of data.

Lack of data.

H304 = May be fatal if swallowed and enters airways.

Danger of cutaneous absorption.

Other information:

Symptoms

May be fatal if swallowed and enters airways. Harmful. Irritant.

May cause an allergic skin reaction.

## **SECTION 12: Ecological information**

### **12.1. Toxicity:**

Aquatic toxicity:

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

Daphnia toxicity: EC50 14,1 mg/L

Acute toxicity aquatic micro-organism: EC50 736 mg/L/3h (OECD 209)

### **12.2. Persistence and degradability:**

Further details:

Readily biodegradable (OECD 301)

Effects in sewage plants:

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

### **12.3. Bioaccumulative potential:**

Partition coefficient: n-octanol/water: at 25 °C: 4.49 logP(o/w) (OECD 117)

An appreciable bioaccumulation potential is to be expected (log P(o/w) >3).

### **12.4. Mobility in soil: No data available**

### **12.5. Results of PBT and vPvB assessment:**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII,

### **12.6. Other adverse effects:**

AOX reference:

Product does not contain organically bound halogen (AOX). General information:

Do not allow to enter into ground-water, surface water or drains.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods:**

**Product**

Waste key number: 14 06 03★ = other solvents and solvent mixtures  
★ = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.



Contaminated packaging Recommendation:

Waste key number: 150107 Glass packaging  
150104 Metallic packaging

Dispose of waste according to applicable legislation.

Handle contaminated packages in the same way as the substance itself.

#### **SECTION 14: Transport information**

**14.1. UN no.:**

ADR/RID, IMDG, IATA:

1299

**14.2. UN proper shipping name:**

ADR/RID, IMDG, IATA:

UN 1299, TURPENTINE

**14.3. Transport hazard class(es):**

ADR/RID:

Class 3, Code F

IMDG:

Class 3, Subrisk P

IATA:

Class 3

**14.4. Packing group:**

ADR/RID, IMDG, IATA:

III

**14.5. Environmental hazards:**

Marine pollutant:

Yes

**14.6. Special precautions for user:**

#### **Land transport (ADR/RID)**

Warning board:

ADR/RID: Kemmler-number 30, UN number 1299 3

Hazard label:

3

Limited quantities:

5L

EQ:

E1

Contaminated packaging – Instructions:

P001 IB CO3 LP01 R001

Special provisions for packing together:

MP19

Portable tanks – Instructions:

T2

Portable tanks – Special provisions:

TP1

Tank coding:

LGBF

Tunnel restriction code:

D/E



#### **Sea transport (IMDG)**

EmS;

F-E, S-E

Special provisions:

-

Limited quantities:

5L

EQ:

E1

Contaminated packaging – Instructions:

P001, LP01

Contaminated packaging – Provisions:

-

IBC – Instructions:

IBC03

IBC – Provisions:

-

Tank instructions – IMO:

-

Tank instructions – UN:

T2

Tank instructions – Provisions:

TP1

Stowage and segregation:

Category A.

Properties and observations:

Colourless liquid, Flashpoint: 35°C c.c. Mixture of resin and volatile oils

Segregation group:

none

Immiscible with water

**Air transport (IATA)**

Hazard:	Flamm. liquid
EQ:	E1
Passenger Ltd.Qty.:	Pack.Instr.Y344 – Max. Net Qty/Pkg. 10 L
Passenger:	Pack.Instr. 355 – Max. Net Qty/Pkg. 60 L
Cargo:	Pack.Instr. 366 – Max. Net Qty/Pkg. 220 L
ERG:	3L

14.7. Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code: No data available

**SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
National regulations – Great Britain

Hazchem-Cocle: 3Y

National regulations – EC member states  
Labelling of packaging with <= 125mL content



Signal word:	<b>Danger</b>	
Hazard Statements:	H302 H304 H312 H317 H332	Harmful if swallowed. May be fatal if swallowed and enters airways. Harmful in contact with skin. May cause an allergic skin reaction. Harmful if inhaled.
Safety Precautions:	P261 P280  P301 + P310  P302 + P352 P331 P333 + P313 P363	Avoid breathing mist/vapours. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER /doctor.  IF ON SKIN: Wash with plenty of water/soap. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Further regulations, limitations and legal requirements:  
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]; P5c and E2

**15.2. Chemical Safety Assessment:**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Further information**

Reason of change: Changes in section 8: Occupational exposure limit values (Great Britain)

Date of first version: 5/18/2005

**Department issuing data sheet**

Contact person: see section 1: Dept, responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe Handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.