



SAFETY DATA SHEET

Revision date: 25 March 2021

Supersedes: 21 January 2021

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

1.1 Product identifier	Shellac solution
1.2 Relevant identified uses of the substance or mixture and uses advised against	As enhanced ageing protective agent for linseed oil paint. Sector Use - SU: SU19 Building and construction work SU20 Health services SU21 Private households (= general public = consumers) SU22 Public domain Chemical Product Category: PC9: Paint Process Categories [PROC]: PROC10. Roller application or brushing PROC11 Non industrial spraying 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	Allbäck Linoljeprodukter AB
Address	Östra Balkåkravägen 18 SE-271 91 Ystad Sweden
Phone	+46-(0)411-602 02
e-mail	allback@allbackpaint.com
Contact	Sonja Allbäck
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.
Issued by	Ann Martens, Ramboll Sweden AB, +46-(0)10-615 54 47

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture (CLP EG/1272/2008)

Flam. Liq. 2. H225 Highly flammable liquid and vapour.

2.2 Label elements

GHS Pictogram	
Signal Word	Danger



Hazard statement	H225 Highly flammable liquid and vapour
Precautionary Statement- Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary Statement- Response	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332 + P313 If skin irritation occurs: Get medical advice/attention.
Precautionary Statement- Storage	
Precautionary Statement- Disposal	P501 Dispose of contents/container for disposal as hazardous waste.

Content: Ethanol 55-65%, Shellac 35-45%

Other label required

VOC content of 614 g/l. Limit for "Binding primers, solvent-based, category h" is 750 g/l in both 2007 and 2010.

2.3 Other hazards

Vapours may affect the central nervous system and cause fatigue and drowsiness. The vapors are heavier than air and can be ignited by static electricity or other sources of ignition.

3. COMPOSITION/INFORMATION ON INGREDIENTS

EC-no	CAS-no	REACH reg. no.	Components name	Conc.	Classification	Remark.
200-578-6	64-17-5	(REACH-no) 01-2119457610-43-XXXX (EU index nr) 603-002-00-5	Ethanol	55-65 %	CLP: Flam. Liquid 2; H225	WEL
232-549-9	9000-59-3	Exempted from registration	Shellac	35-45%		
Explanation of abbreviations: CAS-nr. = Chemical Abstracts Service; EU-no (Eines- or Elincs number) = 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.						

Shellac is a natural resin secreted by the lac bug (*Laccifer lacca*, Coccidae).

For risk phrases in full text see section 16.



4. FIRST AID MEASURES

4.1 Description of first aid measures	
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.
Skin contact	Remove contaminated clothes. Wash the skin with water and soap.
Eye contact	Remove contact lenses. Rinse immediately with plenty of water. If symptoms persist, seek medical help.
Ingestion	If swallowed Do NOT induce vomiting. If unconscious, put in recovery position. Only when conscious, rinse mouth with plenty of water and drink 2 glasses of water or milk. Seek medical attention immediately.
4.2 Most important symptoms and effects, both acute and delayed	
Inhalation	Provides drowsiness and affects the central nervous system.
Skin contact	Prolonged contact will dry out and irritate skin. Absorption through skin can cause the same symptoms as inhalation.
Eye contact	May cause serious eye damage. Prolonged contact can probably cause permanent damage to the eye.
Ingestion	Prolonged ingestion may cause effects on the central nervous system and liver damage.
4.3. Indication of any immediate medical attention and special treatment needed	Inhalation or ingestion of high concentrations leads to the risk of CNS depression and cardiac arrhythmias. Oxygen may be needed for severe influence on the general condition.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media a. Recommended Extinguishing media b. Not Recommended Extinguishing media	a. Water mist, alcohol-resistant foam, carbon dioxide or dry powder. b. Strong water jet. Foam with environmental harmful substances.
5.2 Special hazards arising from the substance or mixture	Ethanol is flammable and can form explosive mixtures with air. Vapors can spread along the ground and be ignited by static electricity or other ignition causes.
5.3 Advise for firefighters	Avoid inhaling smoke. Evacuate the area. If major fire wear self-contained breathing apparatus. Cool fire exposed surfaces with water. Remove combustible materials. Prevent entry to water or sewers. Take measures to dispose of firefighting water.



6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	Stop leak if possible without risk. Avoid static discharge. Vent vapors carefully. The vapors are heavier than air and may spread along the floor. For personal protection equipment see section 8.
6.1.2 For emergency responders	Vent vapors carefully. Contain and take care of emissions. For personal protection equipment see section 8.
6.2 Environment precautions	Prevent discharge to the sewage system.
6.3 Methods and material for containment and cleaning up	Make embankments with sand or other inert absorbent and collect spillage. Small amounts may be absorbed with vermiculite (free from asbestos) or other inert material. Move to a safe area and allow fumes to dissipate. Do not use vacuum cleaner (risk of electrostatic discharge in the equipment).
6.3.1. Surrounding embankment /sealing	
6.3.2 Recommended cleaning up measures	
6.3.3 Non-recommended measures	
6.4 Reference to other sections	For personal protection see section 8. For disposal of waste, see section 13.

7. HANDLING AND STORAGE

7.1 Precaution for safe handling	Take precautions against static electricity. Remove ignition sources. Do not handle near hot surfaces or equipment that may generate sparks or flames. Mechanical ventilation may be required. Do not use ethanol in small poorly ventilated areas. Risk of suffocation in low-lying areas if vapors accumulate.
7.2 Condition for safe storage, including any incompatibilities	Store in sealed original containers in a well-ventilated cool place. Do not store in aluminum containers. Suitable materials are steel, antistatic polypropylene or HD-polyethylene. Protect container from heat and direct sunlight. Take precautions against static electricity. Choose electrical equipment and ventilation suitable for the handling and storage of ethanol. Observe the EU ATEX directives as they have been introduced in national legislation. Vapor concentration on the floor and in low lying areas may be ignited by static electricity or other ignition causes.
7.3 Specific end use(s)	-

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Occupational Exposure Limits, EH40

EU-no	CAS-no	Substance name	OES 8 h	MEL 5 min	OES 15 min	Year
200-578-6	64-17-5	Ethanol	1000	-	-	UK value



			ppm / 1920 mg/m ³			
--	--	--	------------------------------------	--	--	--

PNEC och DNEL/DMEL

Data is from REACH registration of ethanol.

CAS-nr	Substance-name	PNEC (type of environment)	DN(M)EL (rout of exposure)	Exposure scenario nr.
64-17-5	Ethanol	PNEC (freshwater) 0,96 mg/L PNEC (marine water) 0,79 mg/L PNEC freshwater (intermittent release) 2,75 mg/L PNEC STP 580 mg/L PNEC sediment (freshwater) 3,6 mg/kg dw sediment(PNEC sediment (marine water) 2,9 mg/kg dw sediment PNEC jord 0,63 mg/kg dw PNEC oral 0,72g/kgfood	Worker Acute exposure local effects DNEL inhalation 1900 mg/m ³ Long term exposure systemic effects DNEL Dermal 350 mg/kg body weight/day DNEL Inhalation 950 mg/m ³ For Other DNEL see REACH registration of ethanol	None

Biological limit values	None
Recommended surveillance procedure	Measurements of ethanol content in the air may be required if there is a suspicion that occupational exposure limits are exceeded.

8.2 Exposure controls

8.2.1 Recommended technical control measures	Good ventilation when using the product. Use at least local extractors when handling indoors.
8.2.2 Individual protection measures, e.g. personal protection equipment	
Eye/face protection	If risk of splashing, wear safety goggles or face shield. All materials in protective glasses work with ethanol.



Skin protection i) Hand protection (material, thickness, breakthrough time) ii) Other protection	i) Use gloves of butyl, neoprene or nitrile. Permeation time probably > 8 hrs. Thin disposable gloves can be used for very short exposure if nitrile latex is selected, <1 hour. Disposable PVC gloves are clearly unsuitable. ii) Normal protective clothing with long sleeves and legs. Choose non-inflammables materials.
Respiratory protection	Use the half- or full mask (after long term exposure) with gas filter A.
8.2.3 Environmental exposure control	Avoid leakage to surface water or sewage system. For large spills of ethanol, separation may be necessary, e.g. with carbon, zeolites or gas wash. If large emission of ethanol, it can be necessary to clean the emissions with carbon filter, zeolite or similar techniques.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance/State of aggregation	Viscous liquid
Colour	Transparent, Light beige
Odour	Alcohol
pH	2,10-2,3 (100 % ethanol)
Density	1.3 kg/l
Boiling point	78 °C (ethanol)
Meltingpoint/ Freezingpoint	-114 °C (ethanol)
Flash point	12°C (ethanol)
Flammable (solid, liquid, gas)	Both liquid and gas
Upper and lower flammability limits	3.3 to 19% (Chemical substances for ethanol)
Vapour pressure	5,9 kPa (Chemical substances for ethanol)
Density	1,3 kg/l
Solubility in water	Completely soluble
Partition coefficient n-octanol/ water	logKow -0,35 (etanol)
Ignition temperature	> 363 < 425 °C (etanol)
Viscosity	Not detrmind
Oxidizing properties	None

9.2 Other information

-

10. STABILITY AND REACTIVITY

10.1 Reactivity	Ethanol reacts violently with strong oxidizing agents.
10.2 Chemical stability	Stable at normal storing conditions
10.3 Possibility of hazardous reactions	None under normal storage conditions.



10.4 Conditions to avoid	Stored at normal room temperature and protected from direct sunlight. Take precautions against static electricity, heat and sparks. Store away from strong oxidizing and reducing agents.
10.5 Incompatible materials	Do not store in aluminum containers. Some materials can swell in ethanol. May damage certain lacquered and painted surfaces and degrease the protective wax coating or seals.
10.6 Hazardous decomposition products	In fire, carbon monoxide and carbon dioxide are produced, but otherwise no hazardous decomposition products are.

11. TOXICOLOGICAL INFORMATION

Substances

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

The values below are from the REACH registration of ethanol.

a) Acute toxicity

Short term exposure

Ingestion: LD50 (rat) 10470 mg/kg. Ingestion may cause effects on the central nervous system and cause drowsiness and fatigue. At high intake risk of unconsciousness and possibly respiratory arrest can occur.

Inhalation: LC50 124.7 mg/l 4 hours. Inhalation causes the same symptoms as if swallowed.

Eye contact: Irritating to eyes.

Skin Contact: Slight irritant. Causes skin dryness

Long term exposure:

Ingestion: Excessive ingestion may cause permanent damage to the central nervous system and liver damage.

Inhalation: May cause the same type of damage as if swallowed.

Eye contact: Prolonged eye contact can cause serious eye damage.

Skin contact: Prolonged contact may dry out the skin and may cause atopic eczema.

b) skin corrosion/irritation Ethanol gives minor irritation to the skin. OECD 404 (rabbit). Human trial with 80% solution gave no irritation (used every 20 min for 6 hours)

c) serious eye damage/eye irritation Eye irritation OECD 405 (rabbit)

d) Respiratory/skin sensitization Ethanol is not a skin or respiratory allergen.

e) mutagenicity in germcells Ethanol is not mutagenic in tests on various bacterial and mammalian cell types.

f) Carcinogenicity Ethanol is not carcinogenic at doses below the OEL. To get increased cancer incidence high doses for a long time is needed in animal studies.

g) Reproductive toxicity Ingestion of ethanol during pregnancy can cause serious damage to the fetus, eg. cause lower birth weight or brain damages.

11.2. Information on other hazards

12. ECOLOGICAL INFORMATION

12.1 Toxicity

The values below are from the REACH registration of ethanol.

Acute toxicity

Fish: LC50 15.3 g/l (Pimephales promelas)

Crustaceans: EC50 1.833 mg / l (424 h) (Artemia salina)



Algae: EC10 = 11.5mg / l EC50 (72hr) = 275mg/l, green algae, static, OECD 201.

Long term toxicity

Fish: white sturgeon embryos NOEC 24 d 1 mg/l

Crustacean Daphnia Magnaa, LC50 9248 mg / l 2days

12.2 Persistence and degradability

Ethanol is readily biodegradable (96% 20 days)

12.3 Bioaccumulative property

Ethanol do not bioaccumulate.

Log Kow -0.35

BCF 0.2

12.4 Mobility in soil

Ethanol is completely water soluble and is highly volatile in the environment.

12.5 Results of PBT and vPvB assessment

Ethanol is not a BPT or vPvB substance

12.6. Endocrine disrupting properties

None

12.7. Other adverse effects

-

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Can be reused by distillation, otherwise burnt in licensed ethanol facilities for excepted hazardous waste.
Waste codes (EWC)	Depends where the waste is produced, but suitable codes are 07 01 04, 08 01 11 or 08 04 09
The product is classified as hazardous waste	Yes
Waste codes (EWC) for the container	A suitable code for empty package is 15 01 04. If the packaging is not fully empty the content is considered as hazardous waste
A not thoroughly cleaned container is considered dangerous waste	Yes
Other information	See section 8 for personal protection during disposal of waste.

14. TRANSPORT INFORMATION

General	Classified as hazardous goods
14.1 UN number	1170
14.2 UN Proper Shipping Name	Ethanol



14.3 Transport hazard class(es)	ADR/RID/AND 3 IMDG IATA Hazard Identification no. 33
14.4 Packing group	ADR/RID/AND IMDG IATA II
14.5 Environmental hazards	ADR/RID/ADN IMDG Not marine pollutant.
14.6 Special precautions for users	ADR/RID/AND Tunnelrestriktioner D/E IMDG F-E, S-D IATA
14.7 Maritime transport in bulk according to IMO instruments	IMDG Non specific

15. REGULATORY INFORMATION

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

Storage and handling of flammable liquids is regulated in several provisions and regulations.

15.2 Chemical safety assessment

Not known for ethanol in the product. Shellac is excepted from REACH registration. Therefore no CSA has been performed.

16. OTHER INFORMATION

This SDS is changed in the following sections:

New name of the product.

Abbreviations of danger, hazard and precautionary statements from section 2 and 3 in plain text (CLP):

Flam. Liq. 2 = Flammable liquid, category 2.

H225 = Highly flammable liquid and vapour

Sources for data in this SDS

- SDS from supplier of ingredients for this product.
- ECHA database registered substances under REACH. <http://echa.europa.eu/>
- Quick Selection Guide to Chemical Protective Clothing, Krister Forsberg

Other information:

The safety data sheet is based on the REACH regulation EC 1907/2006 and the regulation EU 453/2010.

Classification according to the CLP regulation EC 1272/2008.

Names in section 3 are given either according to harmonised classified substances in Annex VI, CLP regulation EC/1272/2008, IUPAC name or other common used named chosen by the supplier. See article 18 in the CLP regulation.

