



SAFETY DATA SHEET

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name FIRWOOD 94 SINGLE PACK EPOXY GLOSS

Product number 94

Container size 5 litre container

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

1.3. Details of the supplier of the safety data sheet

Supplier Firwood Paints Ltd.
 Oakenbottom Road
 Bolton
 BL2 6DP
 T: +44 (0)1204 525231
 F: +44(0)1204 362522

Contact person e-mail: sales@firwood.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 1204 525231 (08.00-17.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards STOT SE 3 - H336

Environmental hazards Not Classified

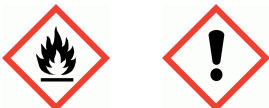
Classification (67/548/EEC or 1999/45/EC) R10, R67

Human health Irritating to skin. Product has a defatting effect on skin.

Physicochemical Heating may generate flammable vapours. Vapours may form explosive mixtures with air.

2.2. Label elements

Pictogram



Signal word Warning

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

Hazard statements	H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness. EUH208 Contains C6-C19 BRANCHED FATTY ACIDS, COBALT (2+) SALTS. May produce an allergic reaction.
Precautionary statements	P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	White Spirit EC 919-857-5, BUTYL ACETATE -norm
Supplementary precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P271 Use only outdoors or in a well-ventilated area. P312 Call a POISON CENTER/ doctor if you feel unwell. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

White Spirit EC 919-857-5	10-30%
CAS number: —	EC number: 919-857-5
Classification	
Flam. Liq. 3 - H226	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
DE-AROMATISED WHITE SPIRIT	10-30%
CAS number: 64742-47-8	EC number: 265-149-8
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226	Xn;R65. R10,R66.
Asp. Tox. 1 - H304	
BUTYL ACETATE -norm	1-5%
CAS number: 123-86-4	EC number: 204-658-1
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226	R10 R66 R67
STOT SE 3 - H336	

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

C6-C19 BRANCHED FATTY ACIDS, COBALT (2+) SALTS		<1%
CAS number: 68409-81-4	EC number: 270-066-5	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302	Xn;R22. Xi;R38. N;R51/53. R43.	
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention. Show this Safety Data Sheet to the medical personnel.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is flammable. Heating may generate flammable vapours. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

DE-AROMATISED WHITE SPIRIT

Long-term exposure limit (8-hour TWA): OEL 1000 mg/m³

BUTYL ACETATE -norm

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³

Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

OEL = Occupational Exposure Limit.

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DE-AROMATISED WHITE SPIRIT (CAS: 64742-47-8)

DNEL	Industry - Dermal; Long term : 300 mg/kg/day Industry - Inhalation; Short term : 1500 mg/m ³ Consumer - Dermal; Long term : 300 mg/kg/day Consumer - Inhalation; Long term : 900 mg/m ³ Consumer - Oral; Long term : 300 mg/kg/day
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BUTYL ACETATE -norm (CAS: 123-86-4)

DNEL	Industry - Inhalation; Short term : 960 mg/m ³ Industry - Inhalation; Long term : 480 mg/m ³ Consumer - Inhalation; Short term : 859.7 mg/m ³ Consumer - Inhalation; Long term : 102.34 mg/m ³
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FIRWOOD 94 SINGLE PACK EPOXY GLOSS

PNEC

- Fresh water; 0.18 mg/l
- Marine water; 0.018 mg/l
- STP; 35.6 mg/l
- Sediment (Freshwater); 0.981 mg/kg
- Sediment (Marinewater); 0.0981 mg/kg
- Soil; 0.0903 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Use protective gloves.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Organic vapour filter.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Odour	Aromatic.
Initial boiling point and range	152-198 @°C @ 760 mm Hg
Flash point	38°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.8
Vapour density	>1
Relative density	0.89-1.1 @ @ 20°C
Solubility(ies)	Immiscible with water
Viscosity	500-800 cP @ 25°C

9.2. Other information

Volatility	60
Volatile organic compound	This product contains a maximum VOC content of <499 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Avoid heat. Avoid contact with the following materials: Strong oxidising agents.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation Vapour from this product may be hazardous by inhalation.

Ingestion Swallowing concentrated chemical may cause severe internal injury.

Skin contact Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.

Eye contact May cause severe eye irritation.

Target organs Skin Eyes Respiratory system, lungs

Toxicological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

ATE dermal (mg/kg) 5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 4.95

Species Rat

BUTYL ACETATE -norm

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 10,760.0

Species Rat

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

ATE oral (mg/kg)	10,760.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD ₅₀ mg/kg)	14,112.0
Species	Rabbit
ATE dermal (mg/kg)	14,112.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC ₅₀ vapours mg/l)	23.4
Species	Rat
ATE inhalation (vapours mg/l)	23.4
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	- NOAEC 3615 mg/m ³ , , Rat
Reproductive toxicity - development	- LOAEC: 7230 mg/m ³ , , Rat
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEC 500 ppmV/4hr/day, Inhalation, Rat

C6-C19 BRANCHED FATTY ACIDS, COBALT (2+) SALTS

<u>Acute toxicity - oral</u>	
ATE oral (mg/kg)	500.0

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Ecological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Acute toxicity - fish	LC ₅₀ , 96 hours: >1000 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , : >100 mg/l, Activated sludge
Chronic toxicity - fish early life stage	NOEC, 28 days: 0.131 mg/l, Onchorhynchus mykiss (Rainbow trout)

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.23 mg/l, Daphnia magna

BUTYL ACETATE -norm

Acute toxicity - fish LC₅₀, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 44 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 647.7 mg/l, Desmodesmus subspicatus

C6-C19 BRANCHED FATTY ACIDS, COBALT (2+) SALTS

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

12.2. Persistence and degradability

Ecological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Biodegradation - Degradation 80: 28 days

BUTYL ACETATE -norm

Biodegradation Water - Degradation 83: 28 days

12.3. Bioaccumulative potential

Ecological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Partition coefficient : 5 - 6.7

12.4. Mobility in soil

Ecological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Surface tension 24.5 mN/m @ 20°C

BUTYL ACETATE -norm

Surface tension 61.3 mN/m @ °C

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT
Proper shipping name (IMDG)	PAINT
Proper shipping name (ICAO)	PAINT
Proper shipping name (ADN)	PAINT

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID label	3
IMDG class	3
ICAO class/division	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
Emergency Action Code	3YE
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

FIRWOOD 94 SINGLE PACK EPOXY GLOSS

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended)
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance	Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

SECTION 16: Other information

Issued by	HS&E Manager.
Revision date	10/12/2014
Revision	8
SDS number	10191
SDS status	Approved.
Risk phrases in full	R10 Flammable. R21 Harmful in contact with skin. R22 Harmful if swallowed. R38 Irritating to skin. R40 Limited evidence of a carcinogenic effect. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. EUH208 Contains C6-C19 BRANCHED FATTY ACIDS, COBALT (2+) SALTS. May produce an allergic reaction.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.