



## SAFETY DATA SHEET

### FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

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 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT  
**Product number** 15B  
**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** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317  
**Environmental hazards** Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

**Classification (67/548/EEC or 1999/45/EC)** Xi; R36/38. N; R50/53. R10, R43

**Environmental** The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

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

##### 2.2. Label elements

###### Pictogram



**Signal word**

**Warning**

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<b>Hazard statements</b>	<p>H226 Flammable liquid and vapour.  H315 Causes skin irritation.  H317 May cause an allergic skin reaction.  H319 Causes serious eye irritation.  H410 Very toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>	<p>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.  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.  P337+P313 If eye irritation persists: Get medical advice/ attention.  P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Supplementary precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P233 Keep container tightly closed.  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.  P261 Avoid breathing vapour/ spray.  P264 Wash contaminated skin thoroughly after handling.  P272 Contaminated work clothing should not be allowed out of the workplace.  P273 Avoid release to the environment.  P302+P352 IF ON SKIN: Wash with plenty of water.  P321 Specific treatment (see medical advice on this label).  P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.  P362+P364 Take off contaminated clothing and wash it before reuse.  P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  P391 Collect spillage.  P403+P235 Store in a well-ventilated place. Keep cool.</p>

### 2.3. Other hazards

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

### 3.2. Mixtures

<b>ZINC POWDER - ZINC DUST (STABILISED)</b>	<b>60-100%</b>
CAS number: 7440-66-6	EC number: 231-175-3
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Aquatic Acute 1 - H400	N;R50/53
Aquatic Chronic 1 - H410	

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

<b>XYLENE</b>	<b>5-10%</b>
CAS number: 1330-20-7	EC number: 215-535-7
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373 Asp. Tox. 1 - H304	<b>Classification (67/548/EEC or 1999/45/EC)</b> R10 Xn;R20/21 Xi;R38
<b>1-METHOXY-2-PROPANOL</b>	<b>1-5%</b>
CAS number: 107-98-2	EC number: 203-539-1
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H312 STOT SE 3 - H336	<b>Classification (67/548/EEC or 1999/45/EC)</b> R10 R67

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

<b>General information</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air at once. 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.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Give plenty of water to drink. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	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.

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

### 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.

#### 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

##### **XYLENE**

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 220 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 441 mg/m<sup>3</sup>(Sk)

##### **1-METHOXY-2-PROPANOL**

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 150 ppm(Sk) 560 mg/m<sup>3</sup>(Sk)

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

#### XYLENE (CAS: 1330-20-7)

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

<b>DNEL</b>	Industry - Inhalation; Short term : 442 mg/m <sup>3</sup>
	Industry - Inhalation; Long term local effects: 221 mg/kg/day
	Industry - Dermal; Long term : 3182 mg/kg/day
	Consumer - Inhalation; Short term : 260 mg/m <sup>3</sup>
	Consumer - Inhalation; Long term : 65.3 mg/m <sup>3</sup>
	Consumer - Dermal; : 1872 mg/kg/day
	Consumer - Oral; Long term : 12.5 mg/kg/day

<b>PNEC</b>	- Fresh water; 0.327 mg/l
	- Marine water; 0.327 mg/l
	- Sediment (Freshwater); 12.46 mg/kg
	- Sediment (Marinewater); 12.46 mg/kg
	- Soil; 2.31 mg/kg
	- STP; 6.58 mg/l

### 1-METHOXY-2-PROPANOL (CAS: 107-98-2)

<b>DNEL</b>	Industry - Inhalation; Short term local effects: 553.5 mg/m <sup>3</sup>
	Industry - Dermal; Long term systemic effects: 50.6 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 369 mg/m <sup>3</sup>
	Consumer - Dermal; Long term systemic effects: 18.1 mg/kg/day
	Consumer - Inhalation; Long term systemic effects: 43.9 mg/m <sup>3</sup>
	Consumer - Oral; Long term systemic effects: 3.3 mg/kg/day

<b>PNEC</b>	- Fresh water; 10 mg/l
	- Marine water; 1 mg/l
	- STP; 100 mg/l
	- Sediment (Freshwater); 41.6 mg/kg
	- Sediment (Marinewater); 4.17 mg/kg
	- Soil; 2.47 mg/kg
- Intermittent release; 100 mg/l	

## 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. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a full facepiece, supplied-air respirator.

## SECTION 9: Physical and Chemical Properties

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

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

<b>Appearance</b>	Viscous liquid.
<b>Odour</b>	Aromatic.
<b>Initial boiling point and range</b>	117 - 143 @°C @ 760 mm Hg
<b>Flash point</b>	30°C CC (Closed cup).
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 0.8
<b>Vapour density</b>	>1
<b>Relative density</b>	3.2 - 3.7 @ @ 20°C
<b>Solubility(ies)</b>	Immiscible with water
<b>Viscosity</b>	1400 - 1500 cP @ 20°C

### 9.2. Other information

<b>Volatility</b>	40
<b>Volatile organic compound</b>	This product contains a maximum VOC content of <380 g/litre.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures.
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### 10.3. Possibility of hazardous reactions

### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat. Avoid contact with the following materials: Strong oxidising agents.
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### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

<b>ATE oral (mg/kg)</b>	15,105.74018127
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#### Acute toxicity - dermal

<b>ATE dermal (mg/kg)</b>	25,175.8607923
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#### Acute toxicity - inhalation

<b>ATE inhalation (gases ppm)</b>	104,253.54462052
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<b>ATE inhalation (vapours mg/l)</b>	229.35779817
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<b>Inhalation</b>	Gas or vapour is harmful on prolonged exposure or in high concentrations.
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<b>Ingestion</b>	Liquid irritates mucous membranes and may cause abdominal pain if swallowed.
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<b>Skin contact</b>	Prolonged or repeated exposure may cause severe irritation. May cause sensitisation by skin contact.
<b>Eye contact</b>	May cause severe eye irritation.
<b>Target organs</b>	Skin Eyes Respiratory system, lungs

### Toxicological information on ingredients.

#### ZINC POWDER - ZINC DUST (STABILISED)

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,000.0

Species Rat

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l) 5.4

Species Rat

#### XYLENE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,700.0

Species Rabbit

ATE dermal (mg/kg) 1,700.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> gases ppmV) 5,000.0

Species Rat

ATE inhalation (gases ppm) 5,000.0

#### 1-METHOXY-2-PROPANOL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 4,016.0

Species Rat

ATE oral (mg/kg) 4,016.0

##### Acute toxicity - dermal

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**Acute toxicity dermal (LD<sub>50</sub>)** 2,000.0  
mg/kg)

**Species** Rabbit

**ATE dermal (mg/kg)** 2,000.0

### SECTION 12: Ecological Information

**Ecotoxicity** The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

#### 12.1. Toxicity

##### Ecological information on ingredients.

#### ZINC POWDER - ZINC DUST (STABILISED)

##### Acute aquatic toxicity

**LE(C)<sub>50</sub>** 0.1 < L(E)C<sub>50</sub> ≤ 1

**M factor (Acute)** 1

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 0.238 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 0.354 mg/l, Daphnia magna  
EC<sub>50</sub>, 21 days: 0.0592 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** NOEC, 72 hours: 0.0729 mg/l, Fish

##### Chronic aquatic toxicity

**NOEC** 0.01 < NOEC ≤ 0.1

**Degradability** Non-rapidly degradable

**M factor (Chronic)** 1

#### XYLENE

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 4.2 mg/l, Onchorhynchus mykiss (Rainbow trout)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >2.93 mg/l, Daphnia magna

**Chronic toxicity - fish early life stage** NOEC, hours: mg/l, Algae

**Chronic toxicity - aquatic invertebrates** NOEC, 96 hours: 3.3 mg/l, Daphnia magna

#### 1-METHOXY-2-PROPANOL

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 6812 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: >21100 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 7 days: >1000 mg/l, Scenedesmus subspicatus



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**Acute toxicity - microorganisms** EC<sub>50</sub>, 3 hours: >1000 mg/l, Activated sludge

### 12.2. Persistence and degradability

#### Ecological information on ingredients.

##### XYLENE

**Persistence and degradability** The product is biodegradable.

##### 1-METHOXY-2-PROPANOL

**Biodegradation** - Degradation 96: 28 days

### 12.3. Bioaccumulative potential

#### Ecological information on ingredients.

##### XYLENE

**Bioaccumulative potential** The product contains potentially bioaccumulating substances.

**Partition coefficient** :

##### 1-METHOXY-2-PROPANOL

**Partition coefficient** log K<sub>ow</sub>: -0.43

### 12.4. Mobility in soil

#### Ecological information on ingredients.

##### XYLENE

**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

##### 1-METHOXY-2-PROPANOL

**Adsorption/desorption coefficient** Water - : ~ 0.6 @ °C

**Henry's law constant** ~ 0.0000014 atm m<sup>3</sup>/mol @ °C

### 12.5. Results of PBT and vPvB assessment

#### Ecological information on ingredients.

##### XYLENE

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

##### 1-METHOXY-2-PROPANOL

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

#### **SECTION 13: Disposal considerations**

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

### 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.

### 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 (ZINC POWDER - ZINC DUST (STABILISED), EPOXY RESIN Number average MW<=700)

**Proper shipping name (IMDG)** PAINT (ZINC POWDER - ZINC DUST (STABILISED), EPOXY RESIN Number average MW<=700)

**Proper shipping name (ICAO)** PAINT (ZINC POWDER - ZINC DUST (STABILISED), EPOXY RESIN Number average MW<=700)

**Proper shipping name (ADN)** PAINT (ZINC POWDER - ZINC DUST (STABILISED), EPOXY RESIN Number average MW<=700)

#### 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



#### 14.6. Special precautions for user

EmS F-E, S-E

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

**Emergency Action Code**        3YE

**Hazard Identification Number**   30  
(ADR/RID)

**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

<b>National regulations</b>	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended)
<b>EU legislation</b>	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).
<b>Guidance</b>	Approved Classification and Labelling Guide (Sixth edition) L131.

##### 15.2. Chemical safety assessment

#### **SECTION 16: Other information**

<b>Issued by</b>	HS&E Manager.
<b>Revision date</b>	09/12/2014
<b>Revision</b>	5
<b>Supersedes date</b>	04/09/2009
<b>SDS number</b>	10172
<b>SDS status</b>	Approved.
<b>Risk phrases in full</b>	R10 Flammable. R20/21 Harmful by inhalation and in contact with skin. R36/38 Irritating to eyes and skin. R38 Irritating to skin. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	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. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs (Respiratory system, lungs) through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

## FIRWOOD 15 TWO PACK ZINC EPOXY PRIMER BASE COMPONENT

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.