SAFETY DATA SHEET
FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

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 18 HIGH BUILD ZINC PHOSPHATE PRIMER

Product number 18

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 Not Classified

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) N; R51/53. R10

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

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

Hazard statements	H226 Flammable liquid and vapour. H411 Toxic to aquatic life with long lasting effects. EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.
Precautionary statements	P273 Avoid release to the environment. 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. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P501 Dispose of contents/ container in accordance with national regulations.
Supplementary precautionary statements	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. P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TRIZINC BIS(ORTHOPHOSPHATE)*2H2O **10-30%**

CAS number: 7779-90-0 EC number: 231-944-3

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC)
N;R50/53.

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
Flam. Liq. 3 - H226
Asp. Tox. 1 - H304

Classification (67/548/EEC or 1999/45/EC)
Xn;R65. R10,R66.

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6	**<1%**
CAS number: 55965-84-9	
M factor (Acute) = 1	M factor (Chronic) = 1

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	T;R23/24/25 C;R34 R43 N;R50/53

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 Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion 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.

Skin contact Remove affected person from source of contamination. 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.

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

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

DE-AROMATISED WHITE SPIRIT

Long-term exposure limit (8-hour TWA): OEL 1000 mg/m³
OEL = Occupational Exposure Limit.

Ingredient comments WEL = Workplace Exposure Limits

TRIZINC BIS(ORTHOPHOSPHATE)*2H2O (CAS: 7779-90-0)

DNEL
Workers - Inhalation; Long term systemic effects: 5 mg/m³
Workers - Dermal; Long term systemic effects: 83 mg/kg/day
Consumer - Dermal; Long term systemic effects: 83 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 2.5 mg/m³
Consumer - Oral; Long term : 0.83 mg/kg/day

PNEC
- Fresh water; 0.0206 mg/l
- Marine water; 0.0061 mg/l
- Sediment (Freshwater); 117.8 mg/kg
- Sediment (Marinewater); 56.5 mg/kg
- Soil; 35.6 mg/kg
- STP; 0.1 mg/l

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

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

DNEL	Industry - Dermal; Long term : 300 mg/kg/day Industry - Inhalation; Short term : 1500 mg/m³ Consumer - Dermal; Long term : 300 mg/kg/day Consumer - Inhalation; Long term : 900 mg/m³ Consumer - Oral; Long term : 300 mg/kg/day

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	1.3 - 1.44 @ @ 20°C
Solubility(ies)	Immiscible with water
Viscosity	440 - 460 cP @ 25°C

9.2. Other information

Volatility	45
Volatile organic compound	This product contains a maximum VOC content of <530 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

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 Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

Toxicological information on ingredients.

TRIZINC BIS(ORTHOPHOSPHATE)*2H2O

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	5.7
Species	Rat
ATE inhalation (dusts/mists mg/l)	5.7

DE-AROMATISED WHITE SPIRIT

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

Species	Rabbit
ATE dermal (mg/kg)	5,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	4.95
Species	Rat

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.

TRIZINC BIS(ORTHOPHOSPHATE)*2H2O

Acute aquatic toxicity	
$LE(C)_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Chronic aquatic toxicity	
NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

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

12.2. Persistence and degradability

Ecological information on ingredients.

DE-AROMATISED WHITE SPIRIT

Biodegradation	- Degradation 80: 28 days

12.3. Bioaccumulative potential

Ecological information on ingredients.

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

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

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.

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 (TRIZINC BIS(ORTHOPHOSPHATE)*2-4H2O)

Proper shipping name (IMDG) PAINT (TRIZINC BIS(ORTHOPHOSPHATE)*2-4H2O)

Proper shipping name (ICAO) PAINT (TRIZINC BIS(ORTHOPHOSPHATE)*2-4H2O)

Proper shipping name (ADN) PAINT (TRIZINC BIS(ORTHOPHOSPHATE)*2-4H2O)

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

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

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

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 20/02/2017

Revision 10

Supersedes date 05/12/2014

SDS number 10152

SDS status Approved.

Risk phrases in full R10 Flammable.
R43 May cause sensitisation by skin contact.
R50/53 Very 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.

FIRWOOD 18 HIGH BUILD ZINC PHOSPHATE PRIMER

Hazard statements in full

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.