



SAFETY DATA SHEET

Fosroc Galvafruid

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

1.1. Product identifier

Product name Fosroc Galvafruid

Product number 1590020UK9,1590022UK9,1590042UK9,1590080UK9,1590120UK9

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

Identified uses Rust-preventing primer.

1.3. Details of the supplier of the safety data sheet

Supplier FOSROC Limited
 Drayton Manor Business Park
 Coleshill Road
 Tamworth
 Staffordshire
 B78 3XN
 enquiryuk@fosroc.com
 Tel. +44 (0) 1827 262222
 Fax. +44 (0) 1827 262444

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (08.30 to 17.00hrs Mon - Thu; 08.30 to 16.00hrs Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Lact. - H362 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC) Xn;R65. N;R50/53. R10.

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

Physicochemical Vapours may form explosive mixtures with air.

2.2. Label elements

Pictogram



Signal word

Danger

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Hazard statements	H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H362 May cause harm to breast-fed children. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with national regulations.
Contains	SOLVENT NAPHTHA, CHLORINATED PARAFFIN (C14-17)
Supplementary precautionary statements	P201 Obtain special instructions before use. 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. P263 Avoid contact during pregnancy/while nursing. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. 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. P312 Call a POISON CENTER/doctor if you feel unwell. P331 Do NOT induce vomiting. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P405 Store locked up.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

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SOLVENT NAPHTHA			10-30%
CAS number: 64742-95-6	EC number: 265-199-0	REACH registration number: 01-2119455851-35	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			
ZINC OXIDE			1-5%
CAS number: 1314-13-2	EC number: 215-222-5		
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	
CHLORINATED PARAFFIN (C14-17)			1-5%
CAS number: 85535-85-9	EC number: 287-477-0	REACH registration number: 01-2119519269-33-xxxx	
M factor (Chronic) = 100			
Classification Lact. - H362 Aquatic Chronic 1 - H410		Classification (67/548/EEC or 1999/45/EC) N;R50/53. R64,R66.	
CALCIUM OXIDE			<1%
CAS number: 1305-78-8	EC number: 215-138-9		
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335		Classification (67/548/EEC or 1999/45/EC) Xi;R41.	

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	Do not induce vomiting. Never give anything by mouth to an unconscious person. 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.

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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. Rinse cautiously with water for several minutes. Continue to rinse for at least 15 minutes and get medical attention.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact Product has a defatting effect on skin. May cause allergic contact eczema. Prolonged or repeated exposure may cause severe irritation.

Eye contact May cause severe eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Specific hazards Dust may form explosive mixture with air. The product is flammable.

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

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear chemical protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For waste disposal, see section 13.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Usage precautions 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 Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SOLVENT NAPHTHA

Long-term exposure limit (8-hour TWA): WEL 19 ppm

CALCIUM OXIDE

Long-term exposure limit (8-hour TWA): WEL 2 mg/m³

WEL = Workplace Exposure Limit

ZINC POWDER - ZINC DUST (STABILISED) (CAS: 7440-66-6)

DNEL	Workers - Inhalation; Long term systemic effects: 5 mg/m ³ Workers - Dermal; Long term systemic effects: 83 mg/kg/day
PNEC	- Fresh water; 20.6 µg/l - Marine water; 6.1 µg/l

SOLVENT NAPHTHA (CAS: 64742-95-6)

DNEL	Professional - Dermal; systemic effects: 25 mg/kg/day Professional - Inhalation; systemic effects: 150 mg/m ³ Consumer - Oral; systemic effects: 11 mg/kg/day Consumer - Inhalation; systemic effects: 32 mg/m ³ Consumer - Dermal; systemic effects: 11 mg/kg/day
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CHLORINATED PARAFFIN (C14-17) (CAS: 85535-85-9)

DNEL	Industry - Inhalation; Long term systemic effects: 1.6 mg/m ³ Industry - Dermal; Long term systemic effects: 47.9 mg/kg/day Consumer - Oral; Long term systemic effects: 0.58 mg/kg/day Consumer - Inhalation; Long term systemic effects: 2 mg/m ³ Consumer - Dermal; Long term systemic effects: 28.75 mg/kg/day
PNEC	- Fresh water; 1000 mg/l - Marine water; 200 mg/l - STP; 80 mg/l

CALCIUM OXIDE (CAS: 1305-78-8)

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DNEL Workers - Inhalation; Long term local effects: 1 mg/m³
Workers - Inhalation; Short term local effects: 4 mg/m³

PNEC - Fresh water; 0.37 mg/l
- Marine water; 0.24 mg/l

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

DNEL Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
Workers - Inhalation; Short term systemic effects: 21.4 mg/m³
Workers - Dermal; Long term systemic effects: 3.3 mg/kg/day
Workers - Dermal; Short term systemic effects: 20 mg/kg/day

PNEC - Fresh water; 0.0058 mg/l
- Marine water; 0.58 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Use protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

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

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Grey.
Odour	Aromatic.
pH	Not applicable.
Initial boiling point and range	155 - 181°C @ 1 atm
Flash point	41°C
Evaporation rate	0.2 (ethanol = 1)
Vapour pressure	0.25 kPa @ 20°C
Relative density	2.6 @ 25°C
Solubility(ies)	Insoluble in water.

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Auto-ignition temperature >450°C

Viscosity 6 P @ 25°C

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 495 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Acids. Alkalis. Oxidising materials.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

Materials to avoid Acids Bases Oxidizing materials

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation May cause respiratory system irritation. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Irritating to eyes.

Acute and chronic health hazards Inhalation Prolonged inhalation of high concentrations may damage respiratory system. SKIN CONTACT. Product has a defatting effect on skin. May cause allergic contact eczema. Prolonged or repeated exposure may cause severe irritation. EYE CONTACT. May cause severe eye irritation. INGESTION. The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Target organs Skin Eyes Respiratory system, lungs

Toxicological information on ingredients.

SOLVENT NAPHTHA

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,592.0

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Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,160.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 6.2

Species Rat

ATE inhalation (vapours mg/l) 6.2

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not determined.

Target organs Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

ZINC OXIDE

Acute toxicity - oral

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Acute toxicity oral (LD₅₀ 7,950.0 mg/kg)

Species Mouse

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0 mg/kg)

Species Rat

CHLORINATED PARAFFIN (C14-17)

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

SECTION 12: Ecological Information

Ecotoxicity The product contains substances which are 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)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

SOLVENT NAPHTHA

Acute toxicity - fish LL50, 96 hours, 96 hours: 9.2 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EL50, 48 hours, 48 hours: 3.2 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOELR, 72 hours, 72 hours: 1 mg/l, Selenastrum capricornutum
Estimated value.

ZINC OXIDE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish , 96 hours, 96 hours: 2246 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >1000 mg/l, Daphnia magna

Chronic aquatic toxicity

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M factor (Chronic) 1

CHLORINATED PARAFFIN (C14-17)

Acute toxicity - fish LC₅₀, 96 hours: >5000 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.006 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic) 100

REACTION PRODUCT WITH FATTY ACID AND AMINOETHYLPIPERAZINE

Acute toxicity - fish LC₅₀, 96 hours: <1 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: <1 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

Ecological information on ingredients.

SOLVENT NAPHTHA

Biodegradation water - Degradation (%) 78: 28 days
The substance is readily biodegradable.

REACTION PRODUCT WITH FATTY ACID AND AMINOETHYLPIPERAZINE

Persistence and degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

CHLORINATED PARAFFIN (C14-17)

Bioaccumulative potential BCF: < 2000 L/kg,

REACTION PRODUCT WITH FATTY ACID AND AMINOETHYLPIPERAZINE

Partition coefficient log Pow: -1.48

12.4. Mobility in soil

Mobility The product contains substances which are insoluble in water and which sediment in water systems. The product contains volatile substances which may spread in the atmosphere.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Ecological information on ingredients.

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SOLVENT NAPHTHA

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

CHLORINATED PARAFFIN (C14-17)

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

12.6. Other adverse effects

Other adverse effects When used and disposed of as intended no adverse environmental effects are foreseen

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

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

UN No. (ADN) 1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID) PAINT RELATED MATERIAL (ZINC POWDER - ZINC DUST (STABILISED))

Proper shipping name (IMDG) PAINT RELATED MATERIAL (ZINC POWDER - ZINC DUST (STABILISED))

Proper shipping name (ICAO) PAINT RELATED MATERIAL (ZINC POWDER - ZINC DUST (STABILISED))

Proper shipping name (ADN) PAINT RELATED MATERIAL (ZINC POWDER - ZINC DUST (STABILISED))

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



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14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN 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
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	05/08/2015
Revision	6b

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Risk phrases in full

R10 Flammable.
R20 Harmful by inhalation.
R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to eyes, respiratory system and skin.
R37 Irritating to respiratory system.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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.
H304 May be fatal if swallowed and enters airways.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H362 May cause harm to breast-fed children.
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.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.