



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
UFI	UFI: 3SD0-R0HN-G00N-MYT0

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

Identified uses	Rust-preventing primer.
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1.3. Details of the supplier of the safety data sheet

Supplier	Fosroc International Limited Drayton Manor Business Park Coleshill Road Tamworth Staffordshire B78 3XN England Tel: +44 (0) 1827 262222 Fax: +44 (0) 1827 262444 enquiryuk@fosroc.com
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1.4. Emergency telephone number

Emergency telephone	+44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226 Water-react. 3 - H261
Health hazards	Lact. - H362 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 1 - H410

Environmental	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
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Physicochemical	Vapours may form explosive mixtures with air.
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2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	H226 Flammable liquid and vapour. H261 In contact with water releases flammable gases. H362 May cause harm to breast-fed children. H304 May be fatal if swallowed and enters airways. 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. P233 Keep container tightly closed. P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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 or shower.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking. EUH018 In use may form flammable/explosive vapour-air mixture.
Contains	HYDROCARBONS, C9, aromatics, CHLORINATED PARAFFIN (C14-17)
Supplementary precautionary statements	P201 Obtain special instructions before use. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P263 Avoid contact during pregnancy and 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. P308+P313 IF exposed or concerned: Get medical advice/ attention. 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. P402+P404 Store in a dry place. Store in a closed container. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

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	60-100%
CAS number: 7440-66-6	EC number: 231-175-3
M factor (Chronic) = 1	
Classification Pyr. Sol. 1 - H250 Water-react. 1 - H260 Aquatic Chronic 1 - H410	

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HYDROCARBONS, C9, aromatics			10-30%
CAS number: 64742-95-6	EC number: 918-668-5	REACH registration number: 01-2119455851-35-0000	
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			
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 (Acute) = 1	M factor (Chronic) = 100		
Classification Lact. - H362 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			
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			

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2-piperazin-1-ylethylamine		<1%
CAS number: 140-31-8	EC number: 205-411-0	REACH registration number: 01-2119471486-30-XXXX
Classification Acute Tox. 4 - H302 Acute Tox. 3 - H311 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd STOT RE 1 - H372 Aquatic Chronic 3 - H412		

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.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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	Treat symptomatically.
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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

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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.
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.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses.
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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.
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6.4. Reference to other sections

Reference to other sections	For waste disposal, see section 13.
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SECTION 7: Handling and storage

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.
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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.
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SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

HYDROCARBONS, C9, aromatics

Long-term exposure limit (8-hour TWA): WEL 100 mg/m³

CALCIUM OXIDE

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

WEL = Workplace Exposure Limit.

ZINC POWDER (CAS: 7440-66-6)

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

PNEC - Fresh water; 20.6 µg/l
- marine water; 6.1 µg/l

HYDROCARBONS, C9, aromatics (CAS: 64742-95-6)

DNEL Professional - Dermal; systemic effects: 25 mg/kg/day
Professional - Inhalation; systemic effects: 150 mg/m³
Consumer - Oral; systemic effects: 11 mg/kg/day
Consumer - Inhalation; systemic effects: 32 mg/m³
Consumer - Dermal; systemic effects: 11 mg/kg/day

CHLORINATED PARAFFIN (C14-17) (CAS: 85535-85-9)

DNEL Industry - Inhalation; Long term systemic effects: 1.6 mg/m³
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/m³
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)

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.

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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. Protective gloves should have a minimum thickness of 0.4 mm.
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.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	155 - 181°C @ 1 atm
Flash point	41°C
Evaporation rate	0.2 (ethanol = 1)
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	0.25 kPa @ 20°C
Vapour density	Not determined.
Relative density	2.6 @ 25°C
Bulk density	Not applicable.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	>450°C
Decomposition Temperature	Not determined.
Viscosity	6 P @ 25°C
Explosive properties	Vapours may form explosive mixtures with air.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

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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 No potentially hazardous reactions known.

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. Oxidising materials. Alkalis.

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.

HYDROCARBONS, C9, aromatics

Acute toxicity - oral

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

Species Rat

Acute toxicity - dermal

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

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Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation 6.2
(LC₅₀ vapours mg/l)

Species Rat

ATE inhalation (vapours 6.2
mg/l)

ZINC OXIDE

Acute toxicity - oral

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 >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >4890 mg/kg, Dermal, Rat

Acute and chronic health May cause harm to breast-fed children.
hazards

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

Chronic aquatic toxicity

M factor (Chronic) 1

HYDROCARBONS, C9, aromatics

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, : 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, : 3.2 mg/l, Daphnia magna

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Acute toxicity - aquatic plants EC₅₀ : 2.6 mg/l, *Pseudokirchneriella subcapitata*

ZINC OXIDE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 1.1 mg/l, *Oncorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.098 mg/l, *Daphnia magna*

Chronic aquatic toxicity

NOEC 0.01 < NOEC ≤ 0.1

Degradability Non-rapidly degradable

M factor (Chronic) 1

CHLORINATED PARAFFIN (C14-17)

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

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

12.2. Persistence and degradability

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

Ecological information on ingredients.

HYDROCARBONS, C9, aromatics

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

CHLORINATED PARAFFIN (C14-17)

Bioaccumulative potential BCF: < 2000 L/kg,

12.4. Mobility in soil

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Mobility The product contains substances which are insoluble in water and which may spread on water surfaces. 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.

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 None known.

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

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Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN 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 MARPOL 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	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (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). 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). Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate.
	CAS: Chemical Abstracts Service.
	DMEL: Derived Minimal Effect Level.
	DNEL: Derived No Effect Level.
	PBT: Persistent, Bioaccumulative and Toxic substance.
	PNEC: Predicted No Effect Concentration.
	vPvB: Very Persistent and Very Bioaccumulative.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision. Revised classification.
Revision date	29/09/2020
Revision	7b
Supersedes date	27/01/2020
Hazard statements in full	H226 Flammable liquid and vapour. H250 Catches fire spontaneously if exposed to air. H260 In contact with water releases flammable gases which may ignite spontaneously. H261 In contact with water releases flammable gases. H302 Harmful 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. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H362 May cause harm to breast-fed children. H372 Causes damage to organs through prolonged or repeated exposure. 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. H412 Harmful 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.