SAFETY DATA SHEET
FIPROKILL 5 SC

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	FIPROKILL 5 SC
Product No.	FIPRON0050SCA

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

Identified uses	Biocidal products (e.g. disinfectants, pest control). Plant protection products.

1.3. Details of the supplier of the safety data sheet

Supplier	Hockley International Ltd Hockley House 3 Longstone Road Ashbrook Office Park Manchester M22 5LB TEL: +44 (0) 161 209 7400 FAX: +44 (0) 161 209 7401 sds@hockley.co.uk

1.4. Emergency telephone number

+44 (0) 161 209 7400 9am - 5pm GMT

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC)	Xn;R20/21/22, R48/22. N;R50/53.

2.2. Label elements

Contains FIPRONIL (ISO)

Labelling

Harmful

Dangerous for the environment

Risk Phrases

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S23	Do not breathe vapour/spray.
S36/37	Wear suitable protective clothing and gloves.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S57	Use appropriate containment to avoid environmental contamination.
S60	This material and its container must be disposed of as hazardous waste.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1,2-PROPANDIOL		5-10%
CAS-No.: 57-55-6	EC No.: 200-338-0	Registration Number: 01-2119456809-23-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

FIPRONIL (ISO)		5% w/v min
CAS-No.: 120068-37-3	EC No.: -	

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 3 - H301	T;R23/24/25,R48/25
Acute Tox. 3 - H311	N;R50/53
Acute Tox. 2 - H330	
STOT RE 1 - H372	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

SILICON DIOXIDE		< 1%
CAS-No.: 7631-86-9	EC No.: 231-545-4	Registration Number: 01-2119379499-19-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

TITANIUM DIOXIDE		< 1%
CAS-No.: 13463-67-7	EC No.: 236-675-5	Registration Number: 01-2119489379-17-XXXX

Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified.	Not classified.

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

Remove affected person from source of contamination. CAUTION! First aid personnel must be aware of own risk during rescue! Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Move the exposed person to fresh air at once. Get medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.

Ingestion

Rinse mouth thoroughly. Get medical attention immediately! If breathing stops, provide artificial respiration.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation.

Tremors, convulsions.

Ingestion

See inhalation.

Skin contact

No data available.

Eye contact

No data available.

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

Treat symptomatically. Antidotes: Treat seizures with benzodiazepines.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Toxic gases/vapours/fumes of: Hydrogen cyanide (HCN). Hydrogen fluoride (HF). Hydrogen chloride (HCl). Sulphurous gases (SOx). Nitrous gases (NOx).

Specific hazards

Dike and collect extinguishing water. Avoid releasing to the environment. Do not discharge into drains, water courses or onto the ground.

5.3. Advice for firefighters

Special Fire Fighting Procedures

In case of fire and/or explosion do not breathe fumes

Protective equipment for fire-fighters

Wear full protective clothing (EN 469). Self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Stop leak if possible without risk.

6.3. Methods and material for containment and cleaning up

Absorb with sand or other inert absorbent. Dike far ahead of larger spills for later disposal. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle and open container with care. Wear protective clothing as described in Section 8 of this safety data sheet. Do not release into the environment. Do not allow to enter drains, sewers or watercourses. Do not eat, drink or smoke when using the product. Wash hands after handling. Remove contaminated clothing. Wash contaminated clothing before reuse. Avoid inhalation of vapours and spray mists.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials listed in section 10 of this safety data sheet. Keep out of the reach of children.

7.3. 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

FIPROKILL 5 SC

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
1,2-PROPANDIOL	WEL	150 ppm	10 mg/m3			
SILICON DIOXIDE	WEL		2.4 mg/m3 resp.dust			
SILICON DIOXIDE	WEL		6 mg/m3 total dust			
TITANIUM DIOXIDE	WEL		4 mg/m3			

WEL = Workplace Exposure Limit.

FIPRONIL (ISO) (CAS: 120068-37-3)

Ingredient Comments

No exposure limits noted for ingredient(s).

1,2-PROPANDIOL (CAS: 57-55-6)

DNEL

Industry	Inhalation.	Long Term	Systemic Effects	168 mg/m3
Industry	Inhalation.	Long Term	Local Effects	10 mg/m3
Consumer	Inhalation.	Long Term	Systemic Effects	50 mg/m3
Consumer	Inhalation.	Long Term	Local Effects	10 mg/m3

PNEC

Freshwater	260	mg/l
Marinewater	26	mg/l
Intermittent release	183	mg/l
STP	20000	mg/l
Sediment (Freshwater)	572	mg/kg
Sediment (Marinewater)	57.2	mg/kg
Soil	50	mg/kg

SILICON DIOXIDE (CAS: 7631-86-9)

DNEL

Industry	Inhalation.	Long Term	Systemic Effects	4 mg/m3

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL

Industry	Inhalation.	Long Term	Systemic Effects	10 mg/m3
Consumer	Oral	Long Term	Systemic Effects	700 mg/kg/day

PNEC

Freshwater	0.127	mg/l
Marinewater	1	mg/l
Intermittent release	0.61	mg/l
STP	100	mg/l
Sediment (Freshwater)	1000	mg/kg
Sediment (Marinewater)	100	mg/kg
Soil	100	mg/kg

8.2. Exposure controls

Engineering measures

Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with particle filter, type P2. (EN 140/143)

Hand protection

Wear protective gloves (EN 374).

Eye protection

Avoid contact with eyes. Wear approved safety goggles (EN 166).

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Thermal hazards

No data available.

Environmental Exposure Controls

Do not release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

FIPROKILL 5 SC

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	White / off-white.

Initial boiling point and boiling range

Not available.

Melting point (°C)

Not available.

Relative density	1.03

Vapour density (air=1)

Not available.

Vapour pressure

Not available.

Evaporation rate

Not available.

pH-Value, Conc. Solution	5 - 8

Viscosity

Not available.

Solubility Value (G/100G H2O@20°C)

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point

Not available.

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Partition Coefficient
(N-Octanol/Water)

Not relevant

Explosive properties

Not available.

Oxidising properties

Not available.

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

None known.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information
Classification according to Directive 1999/45/EC.

Acute toxicity:
Acute Toxicity (Oral LD50)
Calculation method.
Harmful if swallowed.
Acute Toxicity (Dermal LD50)
Calculation method.
Harmful in contact with skin.
Acute Toxicity (Inhalation LC50)
Calculation method.
Harmful by inhalation.

Skin Corrosion/Irritation:
Calculation method. Based on available data the classification criteria are not met.

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

Respiratory or skin sensitisation:
Skin sensitisation
Calculation method.
Based on available data the classification criteria are not met.

Germ cell mutagenicity:
Genotoxicity - In Vitro
Calculation method.
Genotoxicity - In Vivo
Calculation method.
Based on available data the classification criteria are not met.

Carcinogenicity:
Calculation method. Based on available data the classification criteria are not met.

Reproductive Toxicity:
Reproductive Toxicity - Fertility
Calculation method.
Reproductive Toxicity - Development
Calculation method.
Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
Calculation method.
Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Aspiration hazard:
Calculation method. Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Acute toxicity:
Acute Toxicity (Oral LD50)
66 mg/kg Rat
Toxic if swallowed.

Acute Toxicity (Dermal LD50)
354 mg/kg Rabbit
Toxic in contact with skin.

Acute Toxicity (Inhalation LC50)
0.36 mg/l (dust/mist) Rat 4 hours
Fatal if inhaled.

Skin Corrosion/Irritation:
Not irritating.
Based on available data the classification criteria are not met.

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

Respiratory or skin sensitisation:
Respiratory sensitisation
Data lacking.
Skin sensitisation
M & K test
Negative.
Based on available data the classification criteria are not met.

Germ cell mutagenicity:
Non-genotoxic.
Based on available data the classification criteria are not met.

Carcinogenicity:
No indication of human carcinogenicity.
Based on available data the classification criteria are not met.

Reproductive Toxicity:
No reproductive or developmental effects occurred at non-parentally toxic doses.
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:
STOT - Single exposure
Data lacking.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
NOAEL 0.35 mg/kg/day Oral Rat
Causes damage to the nervous system through prolonged or repeated exposure if swallowed.

Aspiration hazard:
Not relevant, due to the form of the product.
Based on available data the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Classification according to Directive 1999/45/EC. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Acute Toxicity - Fish

LC50 96 hours = 0.0852 mg/l Lepomis macrochirus (Bluegill)

LC50 96 hours = 0.248 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours = 0.19 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EbC50 96 hours = 0.068 mg/l Scenedesmus subspicatus

Chronic Toxicity - Fish Early life Stage

NOEC 90 days = 0.015 mg/l Onchorhynchus mykiss (Rainbow trout)

NOEC 35 days = 0.0029 mg/l Cyprinodon variegatus (Sheepshead minnow)

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days = 0.0098 mg/l Daphnia magna

Acute Toxicity - Terrestrial

LD50 = 0.00417 µg/l Apis Mellifera (Honeybee)
(Oral exposure).

LD50 = 0.00593 µg/bee Apis Mellifera (Honeybee)
(Topical exposure).

12.2. Persistence and degradability

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Degradability

The product is not readily biodegradable.

Phototransformation

Soil DT50 = 34 days

Biodegradation

Soil DT50 = 142 days

Water and Sediment DT50 = 68 days

Water DT50 = 54 days

The product is persistent.

12.3. Bioaccumulative potential

Partition coefficient

Not relevant

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Bioaccumulation factor

BCF = 321

Partition coefficient

log Kow = 3.75

12.4. Mobility in soil

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Mobility:

Semi-mobile.

Adsorption/Desorption Coefficient

Koc = 727

Henry's Law Constant

0.000231 Pa m3/mol

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

Ecological information on ingredients.

FIPRONIL (ISO) (CAS: 120068-37-3)

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste is suitable for incineration. Contact specialist disposal companies. Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name	(contains fipronil)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	9
ADR Label No.	9
IMDG Class	9
ICAO Class/Division	9

Transport Labels

14.4. Packing group

ADR/RID/ADN 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-A, S-F
Emergency Action Code	•3Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

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

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

PBT - Persistent, bioaccumulative and toxic. vPvB - Very persistent and very bioaccumulative EN - European standard adopted by the European Committee for Standardisation.

Information Sources

The International Union of Pure and Applied Chemistry (IUPAC) pesticide properties database - http://sitem.herts.ac.uk/aeru/iupac/index.htm Conclusion regarding the peer review of the pesticide risk assessment of the active substance completed by the European Food Safety Authority - http://www.efsa.europa.eu/cs/Satellite International Chemical Safety Card. World Health Organisation (WHO)/Food and Agriculture Organisation of the United Nations (FAO) Joint Meeting on Pesticide Residues monographs and evaluations. Available from www.inchem.org. Food and Agriculture Organisation (FAO) Specifications and Evaluations for Agricultural Pesticides - Evaluation Report. C.D.S. Tomlin, 2009. The Pesticide Manual, 15th Edition (BCPC). Supplier safety data sheet (SDS).

Revision Date	18/04/2013
Revision	1

Risk Phrases In Full

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
NC	Not classified.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Hazard Statements In Full

H372	Causes damage to organs <<Organs>> through prolonged or repeated exposure.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.