

**FIPRONIL EC 25 G****U-WW**

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Version 3 / IND
102000001794Revision Date: 06.01.2015
Print Date: 12.04.2016**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Trade name	FIPRONIL EC 25 G	U-WW
Product code (UVP)	05924596	

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

Use	Insecticide
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1.3 Details of the supplier of the safety data sheet

Supplier	Bayer CropScience Limited Bayer House, Central Avenue, Hiranandani Estate 400607 Thane (W) Maharashtra India
Telephone	+91-22-25311030 / 25311234
Telefax	+91-22-25455116

1.4 Emergency telephone no.

Indian Emergency Number	022-25311885 (24 hours/day)
Global Incident Response Hotline (24h)	+1 (760) 476-3964 (Company 3E for Bayer CropScience)

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Skin irritation: Category 2

H315 Causes skin irritation.

Carcinogenicity: Category 2

H351 Suspected of causing cancer.

Specific target organ toxicity - repeated exposure: Category 2

H373 May cause damage to organs (liver, central nervous system) through prolonged or repeated exposure if swallowed.

Aspiration hazard: Category 1

H304 May be fatal if swallowed and enters airways.

Acute aquatic toxicity: Category 1

H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1

H410 Very toxic to aquatic life with long lasting effects.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi Irritant, R38

Carc.Cat.3, R40

Xn Harmful, R48/22

N Dangerous for the environment, R50/53

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R66**2.2 Label elements**

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Fipronil
- Tributyl phosphate



Signal word: Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H351 Suspected of causing cancer.
 H373 May cause damage to organs (liver, central nervous system) through prolonged or repeated exposure if swallowed.
 H410 Very toxic to aquatic life with long lasting effects.
 EUH066 Repeated exposure may cause skin dryness or cracking.
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
 P331 Do NOT induce vomiting.
 P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
 P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Chemical nature**

Emulsifiable concentrate (EC)
 Fipronil 25 g/l

Hazardous components

R-phrases according to EC directive 67/548/EEC
 Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Conc. [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	

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Fipronil	120068-37-3	T; R23/24/25, R48/25 N; R50/53	Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	2.93
Hydrocarbons, C11-C14, n- alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Xn; R65 R66	Asp. Tox. 1, H304	> 25.00
Tributyl phosphate	126-73-8	Carc.Cat.3 R40 Xn; R22 Xi; R38	Carc. 2, H351 Acute Tox. 4, H302 Skin Irrit. 2, H315	> 1.00 – < 25.00
Nonylphenol ethoxylate	68412-54-4	Xi; R36/38 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	> 0.10 – < 2.50
Polyoxyethylene- nonylphenyl-ether- phosphate	68412-53-3	Xi; R38, R41 N; R51/53	Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 2, H411	> 2.50 – < 25.00
Benzenesulfonic acid, mono-C11- 13-branched alkyl derivs., calcium salts	68953-96-8 273-234-6	Xn; R21 Xi; R38 Xi; R41 R52/53	Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	> 0.25 – < 2.50

Further information

For the full text of the R-phrases/ Hazard statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	Move out of dangerous area. When symptoms develop and persist, seek medical advice.
Inhalation	When inhaled remove to fresh air and seek medical aid.
Skin contact	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Ingestion	Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. Risk of product entering the lungs on vomiting after ingestion. Call a physician or poison control center immediately. Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	The following symptoms may occur: Anxiety, Tremors, Restlessness, Convulsions
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4.3 Indication of any immediate medical attention and special treatment needed

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There is no specific antidote. Carefully monitor the respiratory functions. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. Oxygen or artificial respiration if needed. Keep respiratory tract clear. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Symptoms of poisoning may only appear several hours later. Keep under medical supervision for at least 48 hours.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable** Water spray, Foam, Carbon dioxide (CO₂), Dry powder**Hazchem Code** 3Z**5.2 Special hazards arising from the substance or mixture**

In the event of fire the following may be released: Carbon monoxide (CO), Hydrogen chloride (HCl), Nitrogen oxides (NO_x), Hydrogen fluoride, Sulphur oxides

5.3 Advice for firefighters**Special protective equipment for fire-fighters** Wear self-contained breathing apparatus and protective suit.**Further information** Contain the spread of the fire-fighting media. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****Precautions** Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up** Recover the product by pumping, suction or absorption using a dry and inert absorbent clay. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.**Additional advice** Check also for any local site procedures.**6.4 Reference to other sections** Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

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Advice on safe handling	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Use only in area provided with appropriate exhaust ventilation.
Hygiene measures	Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Smoking, eating and drinking should be prohibited in the application area.
7.2 Conditions for safe storage, including any incompatibilities	
Requirements for storage areas and containers	Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from frost. Keep away from direct sunlight.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.
7.3 Specific end uses	Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Fipronil	120068-37-3	0.035 mg/m ³ (TWA)		OES BCS*
Tributyl phosphate	126-73-8	2.5 mg/m ³ /0.2 ppm (TWA)	2001	IN OEL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 Type 6 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

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Form	Liquid
Colour	colourless to light yellow
pH	3.1 - 3.3 at 1 % (23 °C) (deionized water)
Flash point	≥ 80 °C
Density	ca. 0.86 g/cm ³ at 20 °C
Water solubility	dispersible

9.2 Other information Further safety related physical-chemical data are not known.**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity****Thermal decomposition** Stable under normal conditions.**10.2 Chemical stability** Stable under recommended storage conditions.**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.**10.4 Conditions to avoid** Extremes of temperature and direct sunlight.**10.5 Incompatible materials** Store only in the original container.**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute oral toxicity	LD50 (rat) > 2,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 5.03 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (rat) > 2,000 mg/kg
Skin irritation	Irritating to skin. (rabbit)
Eye irritation	No eye irritation (rabbit)
Sensitisation	Non-sensitizing. OECD Test Guideline 406, Buehler test

Assessment repeated dose toxicity

Fipronil caused specific target organ toxicity in experimental animal studies in the following organ(s): liver. Fipronil caused neurobehavioral effects and/or neuropathological changes in animal studies. Tributyl phosphate did not cause any significant specific adverse effects or target organ toxicity in subchronic toxicity studies.

Assessment Mutagenicity

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Fipronil was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Tributyl phosphate was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Fipronil caused an increased incidence of tumours in rats in the following organ(s): Thyroid. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

Tributyl phosphate caused tumours secondary to the chronic irritation in rats (urinary bladder) and mice (liver) at the highest dose tested in oncogenicity studies. Based on these studies, Tributyl phosphate did not demonstrate any oncogenic potential relevant for human risk assessment.

Assessment toxicity to reproduction

Fipronil caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Fipronil is related to parental toxicity.
Tributyl phosphate did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Fipronil did not cause developmental toxicity in rats and rabbits.
Tributyl phosphate did not cause developmental toxicity in rats and rabbits.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 4.5 mg/l Exposure time: 96 h
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.09 mg/l Exposure time: 48 h
Toxicity to aquatic plants	EC50 (Scenedesmus subspicatus) 0.074 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fipronil.

12.2 Persistence and degradability

Biodegradability Fipronil:
not rapidly biodegradable

Koc Fipronil: Koc: 427 - 1278

12.3 Bioaccumulative potential

Bioaccumulation Fipronil: Bioconcentration factor (BCF) 321
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Fipronil: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Fipronil: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information No other effects to be mentioned.

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Product In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging Empty remaining contents.
Rinsed packaging may be acceptable for landfill, otherwise incineration will be required in accordance with local regulations.
Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product **020108** agrochemical waste containing dangerous substances

Legal basis

Waste key in accordance with Schedule I of the Hazardous Waste Rules, 2008 as amended (India - EP Act):

29.1 Process wastes/residues

29.3 Date-expired and off-specification pesticides

SECTION 14: TRANSPORT INFORMATION**ADR/RID/ADN**

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FIPRONIL SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Hazchem Code	3Z
Tunnel Code	E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FIPRONIL SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FIPRONIL SOLUTION)

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14.3 Transport hazard class(es) 9
14.4 Packing group III
14.5 Environm. Hazardous Mark YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Further information**

WHO-classification: III (Slightly hazardous)

Labeling according to Insecticide Rules 1971 as amended. (INDIA)

Class II: Highly toxic
Colour: bright yellow
Poison!
Keep out of the reach of children.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION**Text of R-phrases mentioned in Section 3**

R21 Harmful in contact with skin.
R22 Harmful if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
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.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful 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.

Text of the hazard statements mentioned in Section 3

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.



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H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
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.

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 453/2010 amending Regulation (EU) No 1907/2006 (and any subsequent amendments). This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 453/2010. Section 3: Composition / Information on Ingredients. Section 2: Hazards Identification.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.