



Bayer CropScience

SAKURA

UVP No.: **79659709**

MATERIAL SAFETY DATA SHEET

Version :
102000023097

Review date : 25.05.2012

Date printed : 08-03-13

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1. PRODUCT AND COMPANY IDENTIFICATION

Name : Bayer (Pty) Ltd.
Address : 27 Wrench Road
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Fax.: +27 (011) 921 5766

Telephone: +27 (011) 921 5911

Emergency telephone numbers:

+27 (021) 931 6129

+27 (011) 624 2800

Trade name : SAKURA

Chemical family : Pyroxasulfone: Pyrazole, isoxazoline

Chemical name : 3-[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)pyrazol-4-ylmethylsulfonyl]-4,5-dihydro-5,5-dimethyl-1,2-oxazole (IUPAC)

Usage : Herbicide

Cas No. : 447399-55-5

Hazchem code: 2Z

UN No. : 3077

IN CASE OF POISONING PLEASE PHONE: +27 (021) 931 6129

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

Irritating to eyes.

May cause sensitization by skin contact.

Limited evidence of a carcinogenic effect.

Danger of serious damage to health by prolonged exposure if swallowed.

Harmful if swallowed, absorbed through the skin or inhaled.

Avoid contact with eyes, skin or clothing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Water dispersible granule (WG)

Chemical Name	CAS-No. / EC-No.	Concentration [g/kg]
Pyroxasulfone	447399-55-5	858.6
Diatomaceous earth	617910-53-2 14808-60-7	21.4
Other	(non-hazardous	129

4. FIRST AID MEASURES

Inhalation

Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

Eye contact

Rinse eyes immediately with plenty of water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.



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Skin	Carefully remove contaminated clothing and wash affected areas immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
Ingestion	DO NOT induce vomiting. Rinse mouth with water. Do not give anything to an unconscious person. Get medical advice.
Notes to Physician	Symptoms: There are no reports of poisoning in humans. Treatment: There is no specific antidote. Treatment must be symptomatic and supportive. Gastric lavage may not be necessary due to low toxicity of the compound. However, administration of activated charcoal and sodium sulphate is advisable with significant ingestions.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, Carbon dioxide (CO₂), foam, sand.

Specific hazards during fire fighting

the event of fire the following may be released:

Carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides, hydrogen fluoride and hydrogen cyanide.

Special protective equipment for fire-fighters

Fire fighters should wear full protective gear, including self-contained breathing apparatus.

Further information

If possible and without risk, remove intact containers from exposure to fire. Contain fire-fighting water by bunding area with sand or earth to prevent it entering any bodies of water. Dispose of fire control water or other extinguishing agent and spillage safely later.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the cleanup process.

Wear personal protective clothing and equipment as detailed in Section 8 Personal protective equipment.

Keep people and animals away.

Environmental Precautions

Contain spillage. Avoid creating dust by damping down. Prevent spilled material from entering drains or watercourses.

Methods for cleaning up

Shovel or sweep up, and transfer into plastic drums. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

Additional Advice

Information regarding safe handling, refer to section 7.

Information regarding personal protective equipment, refer to section 8.

Information regarding waste disposal, refer to section 13.



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7. HANDLING AND STORAGE

Handling

Avoid ingestion, inhalation of dust and contact with skin and eyes. Children and pregnant women should not come in contact with this product. Repeated exposure may cause allergic disorders. When preparing the spray and using the prepared spray, wear cotton overalls, boots, gloves and face shield. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash overalls, boots, gloves, face shield and contaminated clothing.

Storage

Store in the closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight. Store in a place accessible by authorized persons only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure standard

Time Weighted Average (TWA) means the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week. For exposure limits refer to the Occupational Exposure Limits of the Department of Labour.

Engineering controls

Avoid creation of dust. Control process conditions to avoid contact. Only use in a well-ventilated area.

Personal protective equipment

Safety shield. Cotton overalls. PVC gloves and boots.

Respiratory protection is not normally required during normal use of the product. If inhalation is likely an approved respirator should be worn.

Hygiene measures

Remove soiled clothing immediately and clean thoroughly before using again.
Wash thoroughly and put on clean clothing.

Protective measures

Follow all label instructions.
Train employees in safe use of the product.

Protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light brown granule
Odour:	Slight characteristic odour
pH:	~9.5 (1% dilution in water)
Vapour pressure:	2.4 x 10 ⁻⁶ Pa (at 25 °C) – pyroxasulfone

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Vapour density:	Not available
Boiling point:	Not available
Melting point:	130.7 °C – pyroxasulfone
Solubility:	3.48 mg/L (20°C, water) – pyroxasulfone
Bulk Density:	0.6 - 0.7 g/mL (method dependant)
Flash Point:	Not applicable
Flammability (explosive) limits:	Not applicable
Auto-ignition temperature:	Not available
Partition coefficient (octanol/water):	Log P _{ow} : 2.39 (25 °C) – pyroxasulfone

10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended conditions of storage and use.
Conditions to avoid	Avoid sources extremes of temperature and direct sunlight.
Incompatible materials	Strong acid and alkali substances
Hazardous decomposition products	Carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides, hydrogen fluoride and hydrogen cyanide may be released in a fire.
Hazardous reactions	None known

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD ₅₀ rat: >2000 mg/kg
Acute Inhalation Toxicity	LC ₅₀ rat (4 hour): >5.8 mg/L
Acute Dermal Toxicity	LD ₅₀ rat: >2000 mg/kg
Skin Irritation	Not irritating – rabbit
Eye Irritation	Slight irritant – rabbit
Sensitization	Sensitising – Guinea pig



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12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Pyroxasulfone

Avian toxicity: LD₅₀: >2250 mg/kg bobwhite quail

Fish toxicity: LC₅₀ (96 h): >2.2 mg/L rainbow trout
LC₅₀ (96 h): >2.8 mg/L bluegill sunfish

Daphnia toxicity: EC₅₀ (48 h): >4.4 mg/L *Daphnia magna*

Algal toxicity: ErC₅₀ (96 h): 0.00079 mg/L *Pseudokirchneriella subcapitata*

Bee toxicity: LD₅₀ (48 h): >100 µg/bee

13. DISPOSAL CONSIDERATIONS

Product

Do not dispose of waste into sewer. 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.

14. TRANSPORT INFORMATION

Maritime transport IMDG

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (pyroxasulfone)
Hazard Class: 9
UN Number: UN 3077
Packing Group: III

Land transport ADR/RID/RPM

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (pyroxasulfone)
Hazard Class: 9
UN Number: UN 3077
Packing Group: III

Air transport ICAO/IATA

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
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US DOT



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Hazard Class:	9
UN Number	UN 3077
Packing Group:	III

15. REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Symbol:

Xn Harmful

Hazardous components which must be listed on the label:

- Pyroxasulfone

R-phrase(s)

R34	May cause sensitization by skin contact.
R36	Irritating to eyes.
R40	Limited evidence of a carcinogenic effect
R48/22	Danger of serious damage to health by prolonged exposure if swallowed.

S-phrase(s)

S35	This material and its container must be disposed of in a safe way.
S36/37	Wear suitable protective clothing and gloves.
S57	Use appropriate container to avoid environmental contamination.

16. OTHER INFORMATION

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. Addressees are requested to observe any additional national requirements.