



KOTHRINE WG25 120X(10X2)G BAG IN

Version 1 / IND
102000031938

1/12
Revision Date: 11.01.2023
Print Date: 11.01.2023

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

1.1 Product identifier

Trade name KOTHRINE WG25 120X(10X2)G BAG IN
Product code (UVP) 84462713

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

Use Insecticide

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 +91-22-25311826 / 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 AG, Crop Science Division)

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.

Acute toxicity: Category 4
H332 Harmful if inhaled.

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.

2.2 Label elements

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



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Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Deltamethrin



Signal word: Warning

Hazard statements

H332	Harmful if inhaled.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P261	Avoid breathing dust, mist, spray.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).
May form explosible dust-air mixture if dispersed.

Deltamethrin: 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).

Ecological information:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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Toxicological information:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Water dispersible granules (WG)
Deltamethrin 25% w/w

Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

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Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Deltamethrin	52918-63-5	Acute Tox. 3, H301 Acute Tox. 3, H331 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	25
Alkyl-naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	68425-94-5	Eye Irrit. 2, H319 Aquatic Chronic 3, H412	$\geq 10 - < 20$
Aromatic hydrocarbons, C10-13, reaction products with branched nonene, sulfonated, sodium salts	1258274-08-6 01-2119980591-31-xxxx	Skin Irrit. 2, H315 Eye Dam. 1, H318	$\geq 3 - < 10$
Citric acid	77-92-9 01-2119457026-42-XXXX	Eye Irrit. 2, H319 STOT SE 3, H335	$\geq 1 - < 10$

Further information

For the full text of the H-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. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
Ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Local: Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, sneezing
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Systemic:, discomfort in the chest, tachycardia, hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy, Dizziness

4.3 Indication of any immediate medical attention and special treatment needed**Risks**

This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.

Treatment

Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. 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. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable

High volume water jet

Hazchem Code

2Z

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:, Hydrogen bromide (HBr), Carbon dioxide (CO₂), Carbon monoxide, Nitrogen oxides (NO_x), Sulphur oxides

5.3 Advice for firefighters**Special protective equipment for firefighters**

In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information

Contain the spread of the fire-fighting media. 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 dust formation. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water.

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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Use mechanical handling equipment. Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container.

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**

Advice on safe handling Avoid dust formation. Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Dust may form explosive mixture in air. Keep away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

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 away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

Suitable materials Polypropylene-foil (PP)

7.3 Specific end use(s) Refer to the label and/or leaflet.

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

Components	CAS-No.	Control parameters	Update	Basis
Deltamethrin	52918-63-5	0.01 mg/m ³ (TWA)		OES BCS*

*OES BCS: Internal Bayer AG, Crop Science Division "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.

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Respiratory protection	<p>Wear respirator with a particle filter mask (protection factor 10) conforming to European Norm EN149FFP2 or EN140P2 or equivalent.</p> <p>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.</p>										
Hand protection	<p>Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.</p> <p>Wash gloves when contaminated. 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.</p> <table><tr><td>Material</td><td>Nitrile rubber</td></tr><tr><td>Rate of permeability</td><td>> 480 min</td></tr><tr><td>Glove thickness</td><td>> 0.4 mm</td></tr><tr><td>Protective index</td><td>Class 6</td></tr><tr><td>Directive</td><td>Protective gloves complying with EN 374.</td></tr></table>	Material	Nitrile rubber	Rate of permeability	> 480 min	Glove thickness	> 0.4 mm	Protective index	Class 6	Directive	Protective gloves complying with EN 374.
Material	Nitrile rubber										
Rate of permeability	> 480 min										
Glove thickness	> 0.4 mm										
Protective index	Class 6										
Directive	Protective gloves complying with EN 374.										
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).										
Skin and body protection	<p>Wear standard coveralls and Category 3 Type 5 suit.</p> <p>If there is a risk of significant exposure, consider a higher protective type suit.</p> <p>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.</p>										

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Form	water-dispersible granules
Colour	beige
Odour	weak, characteristic
Odour Threshold	No data available
Melting point/range	No data available
Boiling Point	No data available
Flammability	The product is not highly flammable.
Upper explosion limit	No data available
Lower explosion limit	No data available
Flash point	No data available
Auto-ignition temperature	No data available

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Ignition temperature	268 °C
Minimum ignition energy	> 1 J
Self-accelarating decomposition temperature (SADT)	No data available
pH	2.0 - 4.0 (1 %) (23 °C) (deionized water)
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Water solubility	dispersible
Partition coefficient: n-octanol/water	
Partition coefficient: n-octanol/water	Deltamethrin: log Pow: 6.4 (25 °C)
Vapour pressure	No data available
Density	No data available
Relative density	No data available
Bulk density	0.75 - 1.00 g/ml (loose)
Relative vapour density	No data available
Assessment nano particles	This substance/ mixture does not contain nanoforms

9.2 Other information

Explosivity	Not explosive
Burning number	2 CN2 Short flaring without spreading (22 °C) 2 CN2 Short flaring without spreading (100 °C)
Oxidizing properties	No oxidizing properties
Evaporation rate	No data available
Other physico-chemical properties	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under recommended storage conditions.

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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 hazard classes as defined in regulation (EC) No 1272/2008**

Acute oral toxicity	LD50 (Rat) > 3,465 mg/kg
Acute inhalation toxicity	LC50 (Rat) 1.474 - 4.062 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol.
Acute dermal toxicity	LD50 (Rat) > 2,090 mg/kg
Skin corrosion/irritation	Slight irritant effect - does not require labelling. (Rabbit)
Serious eye damage/eye irritation	Slight irritant effect - does not require labelling. (Rabbit)
Respiratory or skin sensitisation	Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test

Assessment STOT Specific target organ toxicity – single exposure

Deltamethrin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient neurobehavioral effects typical for pyrethroid neurotoxicity.

Assessment mutagenicity

Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Deltamethrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Deltamethrin are related to maternal toxicity.

Aspiration hazard

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

Further information

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Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).
The toxicological data refer to a similar formulation.

11.2 Information on other hazards**Endocrine disrupting properties**

Assessment The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish LC50 (*Lepomis macrochirus* (Bluegill sunfish)) 1.9 mg/l
Exposure time: 96 h
Test conducted with a similar formulation.

Toxicity to aquatic invertebrates EC50 (*Daphnia magna* (Water flea)) 0.00018 mg/l
Exposure time: 48 h
Test conducted with a similar formulation.

Toxicity to aquatic plants EC50 (*Raphidocelis subcapitata* (freshwater green alga)) 41.7 mg/l
Exposure time: 72 h
Test conducted with a similar formulation.

12.2 Persistence and degradability

Biodegradability Deltamethrin:
Not rapidly biodegradable

Koc Deltamethrin: Koc: 10240000

12.3 Bioaccumulative potential

Bioaccumulation Deltamethrin: Bioconcentration factor (BCF) 1,400
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Deltamethrin: Immobile in soil

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Deltamethrin: 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 Endocrine disrupting properties

Assessment The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

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Additional ecological information

No further ecological information is available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.

Never place unused product down any indoor or outdoor drain.

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

Triple rinse containers.

Do not re-use empty containers.

Not completely emptied packagings should be disposed of as hazardous waste.

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

3077

14.2 Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE)

14.3 Transport hazard class(es)

9

14.4 Packaging Group

III

14.5 Environm. Hazardous Mark

YES

Hazard no.

90

Hazchem Code

2Z

Tunnel Code

-

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

3077

14.2 Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE)

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



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14.3 Transport hazard class(es) 9
14.4 Packaging Group III
14.5 Marine pollutant YES

IATA

14.1 UN number 3077
14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DELTAMETHRIN MIXTURE)
14.3 Transport hazard class(es) 9
14.4 Packaging 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 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 III: Moderately toxic
Colour: bright blue
Danger!
Keep out of the reach of children.

SECTION 16: OTHER INFORMATION

Text of the hazard statements mentioned in Section 3

H301 Toxic if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2020/878 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.

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