

KOMBAT BONUS

Version: 1.2

Revision Date: August 2018



1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY UNDERTAKING:

PRODUCT INFORMATION

Product Name : KOMBAT BONUS
Design Code : ...
Registration No. : L3614
Use : Insecticide
Company : Kombat (Pty) Ltd
39 Dr. Gordon Road
Greytown
3250
Telephone : 033 417 1906/7



Harmful



Dangerous for the environment

EMERGENCY TELEPHONE NUMBERS

SPILLAGES:

Emergency telephone: +27-(0)32-533-0716 or
Griffon Poison Information Centre +27-(0)82-446-8946

POISONING INCIDENTS:

Poison Information Centre of the Western Cape: +27-861-555-777 (all hours)
Griffon Poison Information Centre +27-82-446-8946 (all hours)
UFS Pharmacology/Toxicology information centre: +27-82-491-0160

2. HAZARD IDENTIFICATION

Toxicity class:

WHO U; EPA IV

A low toxicity pesticide.

Likely routes of exposure:

Skin contact, absorption, and vapour inhalation

Skin:

Causes moderate skin irritation especially on the facial area around the eyes and nose. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Eye:

Irritation, may cause redness, pain and blurred vision.

**Ingestion:**

The toxin may cause numbness of lips and tongue, tremors, nausea, vomiting, diarrhoea, headache, convulsions and respiratory distress.

Inhalation:

Irritation, soreness of respiratory tract; distress.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name:	QUINALPHOS
Chemical Name:	(O,O-DIETHYL O- 2-QUINOXAL -INYL PHOSPHOROTHIOATE) (IUPAC)
CAS N^o:	13593-03-8
Chemical family:	Organophosphates
Chemical formula:	C ₁₂ H ₁₅ N ₂ O ₃ PS
Molecular weight:	298.3
Use:	A stomach and contact insecticide for the control of various insect pests on various crops
Formulation:	Quinalphos 5 g/kg Ready bait
Active ingredients:	Quinalphos (Organophosphorus)
Symbol:	X _n , X _i , N
Indication of danger:	Harmful if swallowed, irritant, environmentally dangerous
Risk Phrases:	R21/25, S22, 36/37, S45

4. FIRST- AID MEASURES**Eye:**

Hold eyelids open and flush with steady, gentle stream of water for at least 15 minutes. Seek medical attention.

Skin:

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Seek medical attention.

Ingestion:

If patient is conscious, wash his mouth with water. Call a doctor or get medical attention. Do not give anything by mouth to an unconscious person.

Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration, preferably not mouth to mouth. Get medical attention.

Note to Physician:

Antidote 1: Atropine sulfate.

Antidote 2: Obidoxime chloride or Pralidoxime (2-PAM).



Suggest serum and/or RBC cholinesterase determination.
If ingested perform gastric lavage and administer activated charcoal.

5. FIRE-FIGHTING MEASURES

Fire and explosion hazard:

Low

Flash point:

Not applicable

This material is not flammable.

Extinguishing agents:

For large fires, use foam, water, move containers from fire area if within risk. Cool containers with water from maximum distance.

Hazardous products of combustion:

Quinalphos decomposes in a fire to emit toxic fumes.

Fire fighting Instructions:

Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. Avoid release of extinguishing water into the environment.

Personal protective equipment:

Fire may produce irritating or poisonous vapours, mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with skin and eyes. Do not breathe in dust or fumes. For personal protection see Section 8.

Environmental precautions:

Do not allow entering of drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill:

Remove all sources of flames and sparks For dry spills, shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labelled, clean, dry container and store in a safe place to await proper disposal. All contaminated cleaning materials should be placed in closable receptacles.

In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Do not contaminate water while cleaning equipment or disposing of wastes. Keep spectators away and upwind.



7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, prolonged contact with skin, and inhalation of spray and fumes. Handle product with caution. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Operators should change and wash clothing after use. Do not apply directly to areas where surface water is present, or to inertial areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Store in its original, labelled and closed container in dry, cool, shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Do not store with other pesticides, fertilizer, seeds, foodstuffs and water supplies. Store away from incompatible substances. Keep out of reach of unauthorized persons, children and animals. Local regulations should be complied with.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator:

It is usually safe to use the product without a respirator. If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from organophosphorus dusts and fumes of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

Wear safety goggles or face shield.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue – green granules

Relative density:

Bulk density: NA

Solubility in water: Low

Flash point: Not applicable

10. STABILITY AND REACTIVITY

Stability:

Stable under normal temperatures and pressures.

Dilution stability: Not applicable

Storage stability:

Stable for 2 years under normal warehouse conditions. Store at temperatures below 100 °C and above 4°C. Stable to light.

Incompatibility: NA

Thermal decomposition:

Toxic fumes are released when the product decomposes on heating.

11. TOXICOLOGICAL INFORMATION (ACTIVE INGREDIENT): note that the toxicology data for the formulation will be significantly lower

Acute oral LD₅₀:

Rat: 26 mg/kg

Acute dermal LD₅₀:

Rat: 300 mg/kg

Inhalation LC₅₀ :

Rat: 175 mg/m³

Acute skin irritation:

May be irritating to skin (rabbit).

Acute eye irritation:

Severe irritation to eyes

Carcinogenicity: Not classified as carcinogenic

Teratogenicity: No teratogenic effects

Mutagenicity: Not classified as a mutagen

12. ECOLOGICAL INFORMATION

Degradability:

Rapid degrading under aerobic conditions. DT₅₀ c. 3 weeks

Mobility:

The product is partly mobile. Its leach is degraded rapidly.

**Accumulation:**

The product shows little or no tendency to bio-accumulate and poses no long term threat to wildlife.

ECOTOXICOLOGY: (for Quinalphos technical material). Toxicology data for the formulation will be significantly lower.

Birds: Toxic.

LD ₅₀ : (14 days)	Japanese quail:	4.3 mg/kg
LD ₅₀ : (14 days)	Mallard duck:	37 mg/kg

Fish: Toxic.

LC ₅₀ (96 hours):	<i>Cyprinus carpio</i> :	3.63 mg/ℓ
LC ₅₀ (96 hours):	Rainbow trout:	0.005 mg/ℓ

Bees: Very Toxic.

LD ₅₀ oral:	0.07 µg/bee
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Algae:	No data available
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Daphnia: Toxic

EC ₅₀ (48 hours):	0.66 µg/ℓ
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Other Beneficial organisms – Earthworms: slightly toxic

LC ₅₀ (7 days):	188 mg/kg soil
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13. DISPOSAL CONSIDERATIONS**Pesticide disposal:**

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be re-used or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal.

Container disposal:

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

Empty the container of any excess product into the applicator. Destroy the emptied containers by perforation and flattening. Do not re-use the empty container for any other purpose. Comply with any local legislation applying to disposal. Dispose of empty containers by using the services of one of the CropLife SA approved containers collectors/recyclers.

Prevent contamination of food, feedstuffs, drinking water and eating utensils.

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14. TRANSPORT INFORMATION

ORGANOPHOSPHORUS PESTICIDE, SOLID, TOXIC

UN NUMBER: 3018

Road Transport ADNR/IRD:

CLASS 6.1 PG II

Air Transport ICAO/IATA:

CLASS 6.1 PG II

Maritime Transport IMDG/IMO:

Marine pollutant YES

Serious Marine Pollutant NO

15. REGULATORY INFORMATION

Symbol: Xi, X_n, N

Indication: Toxic Dangerous for the environment.

Risk phrases: R 21/25
Harmful in contact with skin.

Safety phrases: S22, 36/37, 45
Toxic if swallowed
Do not breath dust
Wear protective clothing and gloves

16. OTHER INFORMATION

Packaging:

Packed in 1Kg, 10Kg, 25Kg woven polypropylene or LLDPE/HDPE plastic/pet containers and labelled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions or recommendations are not followed.

All information is given in good faith, but without guarantee in respect of accuracy and no responsibility is accepted for errors and omissions or the consequence thereof.