

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: QUINALPHOS 25% EC
Use / description of product: Use as an agricultural/horticultural insecticide
Company name: INDOFIL INDUSTRIES LIMITED
Kalpataru Square, 4th Floor,
Kondivita Road, Off. Andheri Kurla Road, Andheri (E),
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2. HAZARDS IDENTIFICATION**GHS Classification****Hazard Symbol****Signal word:****Hazard statement(s):****DANGER**

H224 Extremely flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H313 May be harmful in contact with skin.
H316 Causes mild skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS	%
Active ingredient (Quinalphos)	13593-03-8	25
Other ingredients	-----	QS

4. FIRST AID MEASURES**Most Important symptoms and effects, both acute and delayed****Skin contact**

There may be mild irritation at the site of contact

Eye contact

There may be irritation and redness.

Ingestion

There may be soreness and redness of the mouth and throat

Description of first aid measures**In general**

Never give fluids or induce vomiting if patient is unconscious or

	is having convulsions. Seek medical advice immediately (show the label where possible)
After Ingestion	Do not induce vomiting. Provided the patient is conscious. Wash mouth with water and give plenty of water to drink. Consult a physician or Doctor if victim feels unwell.
After eye contact	Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
After skin contact	Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.
After Inhalation	Remove to fresh air. Consult a physician if irritation develops

Indication of any immediate medical attention and special treatment needed

Supportive care. No specific antidote. Treatment based on judgement of physician, in response to symptoms of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	Water spray. Carbon dioxide. Dry chemical powder.
Exposure hazards:	May form flammable mixture. In combustion emits toxic fumes of sulphur Oxides, nitrogen oxides, carbon dioxide / carbon monoxide.
Protection of fire-fighters:	Wear self-contained breathing apparatus. Run-off from fire control may be a pollution hazard. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Eliminate all sources of ignition. Do not create dust.
Environmental precautions:	Do not discharge into drains or rivers. Contain the spillage using bunding.
Clean-up procedures:	Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure, which may produce sparks.

7. HANDLING AND STORAGE

Handling requirements:	Keep out of reach of children. Do not eat, drink or smoke when using this product. Remove all sources of ignition. Wash thoroughly after handling. Handle in accordance with good industrial and safety practice.
Storage conditions:	Store in original container. Store locked up.
Suitable packaging:	Must only be kept in original packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:	Enclosures, local exhaust ventilation, or other engineering controls to maintain airborne limits. If exposure limits have not been established
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Respiratory protection:
Hand protection:

Wear approved respirator.
Protective gloves

Eye protection:
Skin protection:

Requirements can vary as a function of the use. Therefore, it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.
Safety goggles.
Mixers and loaders must wear overalls, protective goggles and chemical-resistant apron.
Applicators and other handlers must wear overalls, goggles and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

9. PHYSICAL AND CHEMICAL PROPERTIES

State:	Liquid
Colour:	Green
Odour:	Malodorous weak.
Solubility in water:	Forms emulsion in water
pH	5 to 6
Flash point °C:	No data

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to avoid:	Excessive temperatures.
Hazardous decomp. products:	Decomposition on heating above 22°C. Decomposed on heating in alkaline media with the formation of copper oxides. Decomposition will evolve toxic and irritant vapors.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients:	Quinalphos
<u>Acute toxicity (Assessment largely or completely based on data for active substance)</u>	
Acute Oral LD ₅₀ (Rat)	> 71 mg/kg
Acute Dermal LD ₅₀ (Rat)	1750 mg/kg
Acute Inhalation LD ₅₀	0.45 mg/L of air
EYE Irritation (Rabbit)	Not irritant
SKIN Irritation (Rabbit)	Not irritant
Skin Sensitization (Guinea Pig)	Not irritant

12. ECOLOGICAL INFORMATION

Ecotoxicity: (Assessment largely or completely based on data for active substance)

<u>Aquatic toxicity :</u>	Material is very toxic to aquatic organisms.
Fish	
LC ₅₀ (96 h ₁)	Rainbow Trout 0.005 mg/L; Carp 3.63 mg/L
Bird EC₅₀ (48 hr)	Mallard Duck 37mg/kg; Japanese Quail 4.3 mg/kg body wt.
Algae (72h)	
Acute Oral, LD ₅₀	No data
Honey Bee	Material is non-toxic to bees
LD ₅₀ (oral)	0.07 ug/bee
LD ₅₀ (contact)	0.17 ug/bee
Earthworm	
LC ₅₀ (14 d)	No data

Environmental Fate

Persistence and Degradability:	No information available.
Bio-accumulation potential:	No information available
Mobility in soil:	No information available

13. DISPOSAL CONSIDERATIONS

Disposal operations:	Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.
Disposal of packaging:	Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

U.S> Department of Transportation (DOT)

Bulk	
UN no:	3017
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. (Quinalphos)
Hazard Class:	6.1
Packing group:	III

Land Transport (ADR / RID)

UN no:	3017
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. (Quinalphos)
Hazard Class:	6.1
Packing group:	III

Marine Transport (IMDG / IMO)

UN no:	3017
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. (Quinalphos)
Hazard Class:	6.1
Packing group:	III
Marine pollutant:	Yes
EmS:	F-A, S-F

Air transport (IATA / ICAO)

UN no:	3017
Shipping name:	Environmentally Hazardous Substance, solid, n.o.s. (Quinalphos)
Hazard Class:	6.1
Packing group:	III
Cargo Packing instructions:	

15. REGULATORY INFORMATION**Risk Phrases**

R22 - Harmful if swallowed.

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S35 - This material and its container must be disposed of in a safe way.

S57 - Use appropriate containment to avoid environmental contamination. To avoid risks to man and the environment, comply with the instructions for use

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION**Legal disclaimer:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.