

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

Product name: DODINE 65% WP (NOOR)
Use / description of product: Use as an agricultural/horticultural fungicide
Company name: INDOFIL INDUSTRIES LIMITED
Kalpataru Square, 4th Floor,
Kondivita Road, Off. Andheri Kurla Road, Andheri (E),
Mumbai 400 059, Maharashtra, India.
Email: customercare@indofil.com
Toll Free No.: 1800-120-003-004

2. HAZARDS IDENTIFICATION

GHS Classification
Hazard Symbol



Signal word: WARNING
Hazard statement(s):

WARNING

H313 May be harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.
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 (Dodine)	2439-10-3	65
Other ingredients	-----	QS

4. FIRST AID MEASURES

Most Important symptoms and effects, both acute and delayed

Skin contact
Eye contact
Ingestion

There may be mild irritation at the site of contact
There may be irritation and redness.
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 / explosive dust-air 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:	Ensure there is sufficient ventilation of the area. Smoking is forbidden. Use non-sparking tools. When handling do not eat, drink or smoke.
Storage conditions:	Store in cool, well ventilated area. Keep away from sources of ignition. Keep container tightly closed. Keep in original containers, out of reach of children Never allow the product to become wet during storage. This may lead to chemical changes, which will reduce the effectiveness as a fungicide and could create flammable vapours.
Suitable packaging:	Must only be kept in original packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:	Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.
Respiratory protection:	Wear approved respirator.
Hand protection:	Protective gloves 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.
Eye protection:	Safety goggles.
Skin protection:	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:	Solid
Colour:	White
Odour:	Pungent
Solubility in water:	Forms dispersion in water
pH	5 to 9 (1% dispersion)
Melting point °C:	136°C for Dodine

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:	DODINE
<u>Acute toxicity (Assessment largely or completely based on data for active substance)</u>	
Acute Oral LD ₅₀ (Rat)	>1000 mg/kg (male & female rat)
Acute Dermal LD ₅₀ (Rat)	>6000 mg/kg (rats), 1500 mg/kg (rabbit)
Acute Inhalation LD ₅₀	0.47 mg/L for male rat & 0.44 mg/L for female rat
EYE Irritation (Rabbit)	Mild irritation.
SKIN Irritation (Rabbit)	Slight Skin irritant
Skin Sensitization (Guinea Pig)	Not a skin sensitizer.

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,)	For harlequin fish (48h) 0,53mg/L; (96h) 0.6 mg/L
Daphnia EC ₅₀ (48 hr)	0.13 mg/L
Bird	Material is practically non-toxic to birds.
Acute Oral, LD ₅₀	1142 for Mallard ducks; 788 mg/kg for Japanese quail

Honey Bee

LD₅₀ (oral) >200 mg/bee
LD₅₀ (contact) No data

Earthworm

LC₅₀ (14 d) No data

Environmental Fate

Persistence and Degradability: No data
Bio-accumulation potential: Bio-concentration potential is low.
Mobility in soil: Stable in anaerobic aquatic environment.

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: 3077
Shipping name: Environmentally Hazardous Substance, solid, n.o.s.(Dodine 65 WP)
Hazard Class: 9
Packing group: III

Land Transport (ADR / RID)

UN no: 3077
Shipping name: Environmentally Hazardous Substance, solid, n.o.s. (Dodine 65 WP)
Hazard Class: 9
Packing group: III

Marine Transport (IMDG / IMO)

UN no: 3077
Shipping name: Environmentally Hazardous Substance, solid, n.o.s. (Dodine 65 WP)
Hazard Class: 9
Packing group: III
Marine pollutant: Yes
EmS: F-A, S-F

Air transport (IATA / ICAO)

UN no: 3077
Shipping name: Environmentally Hazardous Substance, solid, n.o.s. (Dodine 65 WP)
Hazard Class: 9
Packing group: III
Cargo Packing instructions:

15. REGULATORY INFORMATION**U.S. Regulation :****SARA HAZARD CATEGORY :**

This product has been reviewed according to the EPA "Hazard Categories" promulgated under section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered under applicable definitions to meet the following categories :

- Harmful, Toxic

OSHA HAZARD COMMUNICATION STANDARD :

This Product is a "Hazardous Chemical" as defined by the OSHA Hazard Communicated Standard, 29 CFR 1910.1200.

Hazardous Products Act Information : CPR Compliance

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR).

Australian Inventory of Chemical Substances (AICS)

Dodine is listed in the Australian Inventory of Chemical Substances (AICS).

This product is classified as a Hazardous Substance under Criteria of Safe Work Australia . Xn: Harmful.

This product is not classified as a Dangerous Good according to the ADG Code.

This product is classified as a Dangerous Good according to the IMDG and IATA.

European Inventory of Existing Commercial Chemical Substances (EINECS)

The components of this product are on the EINECS inventory or are exempt from inventory requirements.

EU Directive 67/548/EEC for classification, packaging and labeling of dangerous substances

Dodine is classified as a Harmful and Dangerous for the environment under the Directive 67/548/EEC

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.