

INDOFIL CHEMICALS COMPANY
 KOLSHET, OFF SWAMI VIVEKANAND ROAD,
 AZAD NAGAR, SANDOZ BAUG P.O.,
 THANE – 400 607. MAHARASHTRA (INDIA)
 TEL. NO. : 00-91-22-6799 9100
 FAX NO. : 00-91-22-2589 83 57 / 59



MATERIAL SAFETY DATA SHEET

2-R&D-MSDS-AGRO-FP- 432

SECTION 1. PRODUCT IDENTIFICATION		
Chemical Name	Dicofol	Company Identification INDOFIL CHEMICALS COMPANY KOLSHET, OFF SWAMI VIVEKANAND ROAD, AZAD NAGAR, SANDOZ BAUG P.O., THANE – 400 607. MAHARASHTRA (INDIA) TEL. NO. : 00-91-22-6799 9100 FAX NO. : 00-91-22-2589 83 57 / 59
Trade Name	Colonel-S	
Synonyms		Chemical classification: Organochlorine
IUPAC	2,2,2-trichloro-1,1-bis(4-chlorophenyl) ethanol	
CAS Number	115-32-2	
Formula	C ₁₄ H ₉ Cl ₅ O	

SECTION 2. COMPOSITION / INFORMATION OF INGREDIENTS

COMPONENT NAME	CAS REGISTRY NO	CONCENTRATION
Dicofol	115-32-2	
Emulsifiers		
Solvent		

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state : Liquid
 Colour : Yellow colour EC
 Odor threshold : Mild odour

Harmful or fatal if swallowed - can enter lungs and cause damage
 Contact can cause eye or skin irritation

IMMEDIATE HEALTH EFFECTS

Eye contact	Moderately irritation to eyes
Skin contact	Repeated or prolonged contact can cause irritation or dermatitis
Ingestion	
Inhalation	Inhalation of vapors can irritate the nose and throat

DELAYED OR OTHER HEALTH EFFECTS

Target organs	-----
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An "X" in the box adjacent to the hazard title indicates OSHA Hazard classification. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication standard (29 CFR 1910.1200)

OSHA Health Hazard Classification	OSHA Physical Hazard Classification
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Toxic <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input checked="" type="checkbox"/>	Oxidizer <input type="checkbox"/>
Irritant <input type="checkbox"/>	Sensitizer <input type="checkbox"/>	Combustible <input checked="" type="checkbox"/>	
Corrosive <input checked="" type="checkbox"/>	Carcinogenic <input type="checkbox"/>	Explosive <input type="checkbox"/>	Organic Peroxide <input type="checkbox"/>
		Pyrophoric <input type="checkbox"/>	unstable <input type="checkbox"/>
		Organic peroxide <input type="checkbox"/>	water-reactive <input type="checkbox"/>

SECTION 4 : FIRST AID MEASURES

Eye	Flush eyes with plenty of water for at least 15 minutes and see doctor
Skin	Remove contaminated clothes, wash skin with soap and water
Ingestion	If swallowed dilute by giving 2 glasses of water to drink and call a doctor. Never give by mouth to an unconscious person.
Inhalation	Move subject to fresh air and rest.
Notes to physician	

SECTION 5 : FIRE FIGHTING MEASURES

NFPA Flammability Classification	-----
NFPA RATINGS	Health: 1 Flammability :1 Reactivity: 1
OSHA classification	
Flash point	26°C (Open Cup)
Flash point	Min 43°C (Closed Cup)
Flammability (Explosive limits)	
Auto ignition Temperature	
Hazardous Combustion products	Produces Sulfur dioxide and trioxide
Extinguishing Media	Dry chemical powder, CO ₂ , Water, Water spray
Protection of Fire Fighters	Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective clothing.
Special Properties	Use water spray to cool containers, wear self-contained breathing apparatus.
Unusual Hazards	Fire produces toxic and flammable products : Hydrogen sulfide, CS ₂ , Oxides of Sulfur, Nitrogen and Carbon

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Protective Measures	Eliminate all sources of ignition in the vicinity of the spill. If this material is released into the work area, evacuate the area immediately.
Spill Management	Steps to be taken : Eliminate ignition source. Ventilate area. Contain liquid spill with inert material (sand, earth, etc.). Scoop or shovel solid material in to a suitable container. Keep dust to minimum. Flush cleaned area with water to a chemicals sewer. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

SECTION 7 : HANDLING AND STORAGE

Handling	<p>A spill can cause an immediate fire or explosion hazard. Keep containers closed and do not handle or store near heat, sparks or any other potential ignition sources. Use only with adequate ventilation and personal protection. Avoid contact with eyes, skin, and clothing. Prevent contact with food and tobacco products. Do not reuse empty bag</p> <p>When performing repairs and maintenance on contaminated equipment, Keep unnecessary persons away from area. Eliminate all potential ignition sources. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide adequate ventilation. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.</p>
Storage	<p>Store in a dry shaded, well ventilated area. Do not allow it to become wet or over heated in storage because degradation of the material may occur and fire may result. Provide plenty to ventilation to dissipate heat.</p>

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls	<p>Provide exhaust ventilation or other engineering controls. An emergency eye wash station and safety shower should be located near the work-station.</p>
Personal Protective Equipment	<p>Eye Protection: Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact. Contact lenses should not be worn when working with this chemical</p> <p>Hand protection: Avoid skin contact .Use gloves. Wash hands with plenty of mild soap and water before eating, drinking, use of toilet facilities or leaving work.</p> <p>Body protection: Avoid skin contact. Wear long-sleeved fire-retardant garments. Additional chemical-resistant protective gear may be required. This may include an apron, boots and additional facial protection.</p> <p>Respiratory Protection: Dust / mist filtering respirator or a NIOSH approved respirator.</p> <p>Work practices: users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing. Deluge safety shower and eye wash station should be located in work area.</p>

Occupational exposure limits

Component	Limit		
Dicofol	NA		

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Appearance	Yellow Colour EC
Odor	Mild odour	PH	NA
Specific gravity (water=1)	1.01 – 1.06	Solubility in water	Emulsifiable
Vapor pressure @ (mm Hg)	5 @ 25°C	Vapor density (air=1)	> 1
Viscosity	--	Boiling point (°C)	139-150°C
Melting point	No data		

SECTION 10: STABILITY AND REACTIVITY

Chemical stability	Stable
Conditions to Avoid	Keep dry and avoid excessive heat (> 49°C) and ignition sources.
Material Incompatibility	Oxidizing material
Hazardous Decomposition Products	Oxides of carbon, nitrogen and sulphur
Hazardous Polymerization	Data not available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral toxicity	LD 50 (Oral-Rat) – 570-595 mg/Kg
Acute Dermal toxicity	
Acute Inhalation toxicity	
Eye irritation: This material is irritating to the eyes Skin irritation: This material is irritating to the skin	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Contamination of both terrestrial and marine environments should be avoided.
Environmental fate	No data

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in approved equipment in accordance with local regulations.

SECTION 14 : TRANSPORT INFORMATION

	Not regulated as a hazardous material by any mode of transportation. It is not a marine pollutant. Export water (IMO) : Not regulated Air (ICAO / IATA) : Not regulated
DOT Shipping Name	Not regulated
DOT Hazard class	Not regulated
DOT identification number	No data
DOT packing Group	No data
DOT additional information	No data

SECTION 15: REGULATORY INFORMATION

TSCA Inventory	No data
SARA 311/312 Hazard Identification	Immediate (acute) health effects: yes Delayed (chronic) health effects: yes Reactive: yes This product contains the substances subject to the reporting requirements of SARA title 3, section 313 and 40 CFR part 372.
SARA 302/304 Emergency planning and notification	No data
SARA 313 Toxic chemical notification and Release reporting	This product contains the following components in concentrations above that are listed as toxic chemicals in 40 CFR part 372 pursuant to the requirements of section 313 of SARA.
CERCLA	No data
Clean air act (CAA)	Not applicable

SECTION 16: OTHER INFORMATION

NFPA RATINGS	Health : 1	Flammability :1	Reactivity :1
HMIS RATINGS	Health : 1	Flammability :1	Reactivity :1
	0 = Least 1= slight 2= Moderate 3= High 4=Extreme		

ABBREVIATIONS

STEL	Short term exposure limit
ACGIH	American conference of Government Industrial Hygienists
NIOSH	National institute of safety and health
SARA	Super fund Amendments and Reauthorization Act
TWA	Time weighted average
OSHA	Occupational safety and health
NFPA	National Fire protection agency
HMIS	Hazardous Materials information system
RCRA	Resource conservation Recovery act
TSCA	Toxic substance Control Act
WHMIS	Work place Hazardous Materials information system
IRAC	International Agency for Research on Cancer

MANUFACTURE'S / SUPPLIER'S DATA

Name of Firm : INDOFIL CHEMICALS COMPANY				
Mailing Address: Kolshet, Off Swami Vivekanand Road, Azad nagar, Sandoz Baug P.O. Thane – 400 607.		Gat No. 194, Village – Gahunje, Tal. Maval, Dist. Pune.		S-26 (T), MIDC, Bhosari, Pune – 411 026.
Telephone 6799 9100	Telex		Telephone 22767 5084	Telephone 22712 2302
Fax 2589 8357	Telegraphic Code		Fax 22767 5083	Fax 22712 9242
Local Bodies Involved	Collector of Thane			

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