



INDOFIL INDUSTRIES LIMITED  
 KOLSHET, OFF SWAMI VIVEKANAND ROAD,  
 AZAD NAGAR, SANDOZ BAUG P.O.,  
 THANE – 400 607. MAHARASHTRA (INDIA)  
 TEL. NO. : 00-91-22- 67999100  
 FAX NO. : 00-91-22-2589 83 57 / 59

2-R&amp;D-MSDS-FP-469

MATERIAL SAFETY DATA SHEET

<b>SECTION 1. PRODUCT IDENTIFICATION</b>		
<b>Chemical Name</b>	<b>PROPARGITE 57% EC</b>	<b>Company Identification</b> INDOFIL INDUSTRIES LIMITED KOLSHET, OFF SWAMI VIVEKANAND ROAD, AZAD NAGAR, SANDOZ BAUG P.O., THANE – 400 607. MAHARASHTRA (INDIA) TEL. NO. : 00-91-22- 67999100 FAX NO. : 00-91-22-2589 83 57 / 59
<b>Trade Name</b>	Endmite	
<b>Synonyms</b>	Propargite	<b>GROUP:</b> Sulfur Ester Acaricide
<b>IUPAC</b>	2-(4-tert-butylphenoxy) cyclohexyl prop-2-ynyl sulfite	
<b>CAS Number</b>	2312-35-8	<b>CLASS:</b> Acaricide
<b>Formula</b>	C <sub>19</sub> H <sub>20</sub> O <sub>4</sub> S	
<b>SECTION 2. COMPOSITION / INFORMATION OF INGREDIENTS</b>		
<b>COMPONENT NAME</b>	<b>CAS REGISTRY NO</b>	<b>CONCENTRATION</b>
PROPARGITE	2312-35-8	57%
Other ingredients	-----	43%
<b>SECTION 3. HAZARDS IDENTIFICATION</b>		
<b>EMERGENCY OVERVIEW</b>		
<b>Physical state</b> : Liquid		
<b>Colour</b> : Brown Liquid		
<b>INGESTION</b> : Harmful if swallowed.		
<b>INHALATION</b> : Harmful if inhaled.		
<b>EYE CONTACT</b> : May cause eye irritation.		
<b>SKIN CONTACT:</b> May cause irritation.		
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		
<b>IMMEDIATE HEALTH EFFECTS</b>		
<b>Eye contact</b>	Slightly irritation to eyes	
<b>Skin contact</b>	Moderately irritating	
<b>Ingestion</b>	Harmful if swallowed	
<b>Inhalation</b>	Harmful if inhaled	

**DELAYED OR OTHER HEALTH EFFECTS**

Target organs	No data.		
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	
Toxic <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input type="checkbox"/>	Oxidizer <input type="checkbox"/>
Irritant <input type="checkbox"/>	Sensitizer <input type="checkbox"/>	Combustible <input type="checkbox"/>	
Corrosive <input 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**

<b>Eye</b>	Irrigate the eyes with large amount of water or normal saline occasionally lifting upper and lower lids until no evidence of chemical remains and obtain a medical help.
<b>Skin</b>	Remove contaminated clothing and shoes immediately. Wash contaminated area with soap or mild detergent and large amount of water until no effects of chemical remains. If symptoms persist get medical help. Propargite may be absorbed through the skin with a resultant toxic effect.
<b>Ingestion</b>	Remove by gastric lavage and catharsis; maintain blood pressure and airway, Give oxygen if respiration is depressed. Do not perform gastric lavage if victim is unconscious. Get medical attention immediately.
<b>Inhalation</b>	Remove the patient from the exposure area to fresh air immediately. If breathing has stopped perform the artificial respiration. Keep person warm and rest. Get medical attention immediately
<b>Notes to physician</b>	No specific antidote.

**SECTION 5 : FIRE FIGHTING MEASURES**

<b>NFPA Flammability Classification</b>	-----
<b>NFPA RATINGS</b>	Health: ---      Flammability: ---      Reactivity: ----
<b>OSHA classification</b>	No data
<b>Flash point</b>	35°C
<b>Flammability (Explosive limits)</b>	NA
<b>Auto ignition Temperature</b>	Not available
<b>Hazardous</b>	During a fire, irritating and possibly toxic gases like carbon dioxide,

<b>Combustion products</b>	carbon monoxide, nitrogen oxides, sulfur dioxide, hydrogen chloride, may be generated by thermal decomposition or combustion
<b>Extinguishing Media</b>	Dry chemical, CO <sub>2</sub> , Water spray, standard foam. For larger fire, use water spray, fog or standard foam.
<b>Protection of Fire Fighters</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
<b>Special Properties</b>	Avoid breathing fumes from fire exposed material
<b>SECTION 6 : ACCIDENTAL RELEASE MEASURES</b>	
<b>Protective Measures</b>	Ensure suitable personal protection during removal of spillages. This means wearing a face mask that gives protection against organic vapours, eye protection, chemically resistant gloves, boots and coveralls.
<b>Spill Management</b>	Absorb the material in the sand, soil, diatomaceous earth or suitable absorbent. Place in suitable material and remove to safe place or dispose of in an incinerator approved for chemicals.

### SECTION 7 : HANDLING AND STORAGE

<b>Handling &amp; Storage procedure</b>	Use appropriate (impervious) clothing, gloves and closed footwear to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes. Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well-ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition.
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### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls</b>	<b>Ventilation:</b> Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. Use mechanical exhaust ventilation at sources of air contamination such as open process equipment.
<b>Personal Protective Equipment</b>	<b>Eye / face Protection:</b> Safety Glasses or goggles. <b>Skin protection:</b> Avoid skin contact. Rubber gloves should be worn whenever this material is handled. Wash hands with clean water. <b>Body protection:</b> Avoid skin contact. Wear impervious clothing and closed foot ware. <b>Respiratory Protection:</b> Wear suitable mask.

#### Occupational exposure limits (exposure limit information)

Component	Limit	TWA	STEL	Ceiling	Notation
Propargite	OSHA ACGIH	No data	No data	No data	No data

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid	<b>Colour</b>	Brown colour
<b>Odor</b>	Slight solvent odour	<b>pH (1%)</b>	4.5 To 7.2

<b>Specific gravity</b>	1.026	<b>Solubility in water</b>	Emulsifiable in water. Miscible in organic solvents
<b>Vapor pressure @ 25°C</b>	Not applicable	<b>Vapor density</b>	0.0102 (air = 1)
<b>Viscosity</b>	Not applicable	<b>Boiling point</b>	235-264°C
<b>Melting / Freezing point</b>	No data	<b>Evaporation rate</b>	Not applicable

### SECTION 10: STABILITY AND REACTIVITY

<b>Chemical stability</b>	This material is chemically stable under normal and anticipated storage and handling conditions.
<b>Conditions to Avoid</b>	Excessive temperatures.
<b>Material Incompatibility</b>	Incompatible with strong acids and alkaline material.
<b>Hazardous Decomposition Products</b>	Decomposition will evolve toxic and Irritant vapors.
<b>Hazardous Polymerization</b>	Will not occur

### SECTION 11: TOXICOLOGICAL INFORMATION

(Assessment largely or completely based on data for Propargite Active Substance)

Acute Oral toxicity LD <sub>50</sub>	2843 mg/kg for rats
Acute Dermal toxicity LD <sub>50</sub>	> 4000 mg/kg for rabbits
Acute Inhalation toxicity LC <sub>50</sub>	> 0.05 mg/L (4 h) for rats
Eye irritation (Rabbits):	Severe irritant
Skin irritation (Rabbits):	Severe irritant
Skin Sensitizer (Guinea Pig):	Not a skin sensitizer

### SECTION 12: ECOLOGICAL INFORMATION

Assessment largely or completely based on data for Propargite Active Substance)

#### Eco-toxicity:

<b>Fish</b> LC <sub>50</sub>	For rainbow trout 0.043; bluegill sunfish 0.081 mg/l
<b>Birds</b> LD <sub>50</sub>	For Mallard ducks >4640 mg/kg
<b>Acute Dietary</b> LC <sub>50</sub>	For Mallard ducks >4640; bobwhite quail 3401 mg/kg diet
<b>Algae</b> LC <sub>50</sub>	For <i>Selenastrum capricornutum</i> >1.08 mg/l (no effects on highest test conc.)
<b>Daphnia</b> LC <sub>50</sub>	0.014 mg/l (48 h)
<b>Environmental Fate</b>	Although Propargite is considered a non-systemic pesticide, a small portion of the applied dose penetrates the outside layer of the foliage and undergoes the same metabolism as is observed in the animals. In mammals, Propargite is hydrolyzed at the sulfite ester linkage and subsequent hydroxylation of the <i>tert-butyl</i> side chain. In soil/environment, DT50 40-67 d (aerobic soil, pH 6 to 6.9, o.c. 1-2.55% 22-25°C).

**SECTION 13: DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL PROCEDURES: Waste disposal should be in accordance with existing federal, state and local environmental regulations. Dispose of empty, used containers in approved incineration plant in approved land filling area or in a disposal pit away from desirable plants and their roots and water courses. On-site disposal of undiluted product is unacceptable.

**SECTION 14: TRANSPORT INFORMATION**

	Marine pollutant : Yes
<b>DOT Shipping Name</b>	DOT Technical Name : PROPARGITE
<b>DOT Hazard class</b>	3 (Flammable liquid) UN number 1307
<b>DOT identification number</b>	Packaging Group: III
<b>DOT additional information</b>	Classified as Dangerous goods for transport by road and Rail.

**SECTION 15: REGULATORY INFORMATION**

<b>Work place classification</b>	Hazard categories under criteria of SARA Title III rules (40 CFR part 370) Immediate acute health Y Delayed chronic health N Fire N Reactive N Sudden Release of pressure N
<b>SARA TITLE 3 : SECTION 311/312 Hazard Identification</b>	Harmful, Toxic
<b>SARA TITLE 3 : SECTION 302/304 Emergency planning and notification</b>	-----
<b>SARA TITLE 3: SECTION 313 Toxic chemical notification and Release reporting</b>	This product does contain chemicals which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of title III of the superfund amendments and Reauthorization act of 1986 and 40 CFR part 372
<b>CERCLA (40 CFR 302.4)</b>	-----
<b>Waste classification</b>	No data
<b>Clean Air Act</b>	No data

**SECTION 16: OTHER INFORMATION**

<b>NFPA RATINGS</b>	Health : 1      Flammability : --      Reactivity :---
<b>HMIS RATINGS</b>	Health : ----      Flammability :----      Reactivity :---
	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**

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Local Bodies Involved	Collector of Thane		

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