



Hop Oils (Type Noble & Dry; Steam Distilled)

MATERIAL SAFETY DATA SHEET

Section I. PRODUCTS AND SUPPLIER	
Supplier's Name S. S. Steiner, Inc. or Simon H. Steiner Hopfen GmbH or Steiner Hops Ltd.	Emergency Telephone No. USA: +1-509-453-4731 or Germany: +49-8751-8605-0 UK: +44-1992-572331
Address 1 West Washington Avenue, Yakima, Washington 98903, USA or Auhofstrasse 18, 84048 Mainburg, Germany or 319A High Street, Epping, Essex CM16 4DA, United Kingdom	
Product Names 1. Hop Oil Type Noble 2. Hop Oil Type Dry 3. Steam Distilled Hop Oil	Trade Name and Synonyms Hop Essential Oils, Pure Hop Oil.
CAS No(s). Not available	
Chemical Family Essential Oil Fraction of hops; organic.	Formula Not applicable
Section II. COMPONENTS	
Material or components A complex mixture of natural monoterpene and sesquiterpene hydrocarbons (particularly including myrcene, humulene and caryophyllene) together with their oxygenated derivatives.	% 100% Hop Oil components
Section III. PHYSICAL DATA	
Boiling Point °C (°F.) Variable above 71°C (160°F)	Specific Gravity (H₂O = 1) Typically in range 0.80 – 0.86
Vapor Pressure (mm Hg.) Not known	Volatiles by volume (%) >99%
Vapor Density (AIR =1) Not known	Evaporation Rate (Ether =1) Moderate
Solubility in Water Insoluble	Solubility in Alcohol Mostly soluble
Appearance and Odor Clear or pale yellow liquid with a moderately pungent, typically hoppy aroma.	



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Section IV. FIRE AND EXPLOSION HAZARD DATA			
Flash Point (Method used) Not known	Flammable Limits Not known	Le¹	Ue^f
Extinguishing Media CO ₂ , Powder or Foam.			
Specific Fire Fighting Procedures Wear breathing apparatus and goggles to prevent inhalation of vapors and contact with eyes.			
Unusual Fire and Explosion Hazards Generation of explosive vapour possible in confined space. Do not allow to contaminate drains.			
Section V. HEALTH HAZARD DATA			
Threshold Limit Value None known			
Effects of Exposure Non-toxic. <u>Oral Ingestion</u> : Not known. <u>Eye contact</u> : Severe irritant; may cause corneal inflammation. <u>Skin contact</u> : Prolonged contact may cause dermatitis in some individuals. <u>Inhalation</u> : May irritate mucous membranes and upper respiratory tract.			
Emergency and First Aid Procedures <u>Eye contact</u> : Wash with copious amounts of water; seek medical attention. <u>Skin contact</u> : Remove with proprietary skin cleanser or warm soapy water. <u>Inhalation</u> : Transfer person to fresh air and seek medical attention.			
Section VI. SPILL OR LEAK PROCEDURES			
Prevent contamination of drains. Apply commercial absorbents to spill comparable to clean-up of lubricating oil. Scoop/shovel material into disposal container. Scrub area with hot water and detergent to remove final traces. Use adequate ventilation or a respirator with an organic vapor cartridge if in a confined area. <u>Waste disposal method (for large spills)</u> : Dissolve or mix the material with a combustible solvent (e.g. methanol) and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all applicable laws.			



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Section VII. SPECIAL PROTECTION & PRECAUTION INFORMATION		
Respiratory Protection (Specify type) None required for normal handling. When steam cleaning equipment or spills use a respirator with an organic vapor cartridge.		
Ventilation Normally none required; in case of spills/cleaning, use mechanical ventilation.	Local Exhaust <u>Normal ventilation</u> Mechanical (General)	Special <hr/> Other
Protective Gloves Recommended cloth or rubber gloves.	Eye Protection Use protective goggles or safety glasses.	
Other Protective Equipment Use of low-grade protective clothing (e.g. rubber apron) recommended.		
Precautions Taken in Handling and Storing Store at ambient temperature in unopened original containers. Use opened containers as soon as possible. Avoid contact with skin. Minimum storage temperature: -5°C (23°F). Maximum storage temperature preferably: 10°C (50°F)		
Other Precautions May dissolve certain plastics (e.g. polystyrene)		
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