

MATERIAL SAFETY DATA SHEET

MANUFACTURER: Yakima Chief, Inc.
P.O Box 209
555 W. South Hill Road
Sunnyside, WA 98944
U.S.A
Tel: +1.509.839.90.22
Fax: +1.509.839.55.70

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: YC-HopAroma Super
CHEMICAL NAME: Resin concentrate of lupulones and essential hop oils
CHEMICAL FAMILY: Beta Acid Oil Concentrate

SECTION II - MATERIAL or COMPONENTS

COMPOSITION: A solid or resinous phase (pH 8.5-11) of beta acids, oils and uncharacterized resins produced by CO2 extraction.
Concentration of the beta acids is typically between 35-55% w/w.
Concentration of the hop oils is typically between 15-25% v/w.

HAZARDOUS COMPONENTS: Not Applicable

Resin Concentrate from a Single Product (i.e. Hop Acid)

SECTION III - PHYSICAL DATA

BOILING POINT: > 100°C
FREEZING POINT: -2°C
VAPOUR PRESSURE: Not Applicable
VAPOUR DENSITY: Not Applicable
SOLUBILITY IN WATER: Slightly
APPEARANCE & ODOUR: Yellow, green or brown resin concentrate with a pungent odor.
SPECIFIC GRAVITY: 0.95-1.05
PERCENT VOLATILE by VOLUME: < 25%
EVAPORATION RATE: < 1 (as aqueous solution)

SECTION IV - FIRE & EXPLOSION

FLASH POINT:	Not Applicable
EXTINGUISHING MEDIA:	CO2
SPECIAL FIRE FIGHTING PROCEDURES:	None Required
UNUSUAL FIRE & EXPLOSION HAZARDS:	None
HANDLING:	Avoid exposure of hop aroma product to high temperatures (> 50°C) if it has been admixed to a solid support medium. Hop oil, when on a loose, dry, solid supportive medium, is known to auto-oxidize, creating conditions for spontaneous combustion. This can happen at temperatures 0°C. Rags, paper trash, and clothing that have been contaminated with hop oil should be stored in airtight cans prior to discard or laundering.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE:	Not Established
ORAL INGESTION:	Not applicable – Food product, very bitter therefore unpalatable.
EYE CONTACT:	May be a mild irritant.
SKIN CONTACT:	Prolonged contact could cause dermatitis in some individuals.
INHALATION:	Vapors generated during steam cleaning product spills may cause severe respiratory distress in some individuals.

EMERGENCY FIRST AID:

ORAL INGESTION:	Not Applicable
EYE CONTACT:	Wash with copious amounts of water. Seek medical attention if irritation persists.
SKIN CONTACT:	Wash with warm, soapy water. Seek medical attention if irritation persists. Launder contaminated clothing before reuse.
INHALATION:	Remove affected person to fresh air. Administer oxygen if necessary.

SECTION VI - SPILL or LEAK PROCEDURE

Steps to be taken in case material is released or spilled: Scoop/shovel spilled material into recovery container. Flush area with hot soapy water to remove final traces. Use adequate ventilation or a respirator if in a confined area.

SECTION VII - SPECIAL PROTECTION

PROTECTIVE GLOVES:	Rubber
EYE PROTECTION:	Safety Glasses