

MATERIAL SAFETY DATA SHEET

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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: YC-AlphaRich
CHEMICAL NAME: Resin concentrate of humulones, lupulones and essential hop oils
CHEMICAL FAMILY: Hop Acid Concentrate

Hops fall under recognition by GRAS basis the general provisions of CFR 21, Part 182, Sec. 182.1. CO2 hop extract is specifically listed in Table 182.20.

SECTION II - MATERIAL or COMPONENTS

COMPOSITION: A solid or resinous phase (pH 3-5) of alpha acids, beta acids, oils and uncharacterized resins produced by CO2 extraction.
Concentration of the alpha acids is ranging 60-75% w/w.
Concentration of the beta acids is ranging 7-18% w/w. Waxes and oils are less than 4% w/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: < 3%
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

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