

MATERIAL SAFETY DATA SHEET

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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: YC-Tetra
CHEMICAL NAME: Aqueous solution of the potassium salts of tetrahydroiso-alpha-acids.
CHEMICAL FAMILY: Hop Extracts / Hop Acid Concentrate
SYNONYM: Aqueous solution of potassium tetrahydroisohumulate.

SECTION II - MATERIAL or COMPONENTS

COMPOSITION: An aqueous solution (pH 8.5-11.5) of the potassium salts of the tetrahydroiso-alpha-acids produced by isomerising and hydrogenating the alpha-acids from CO2 hop extract.

HAZARDOUS COMPONENTS: Concentration of the tetrahydroiso-alpha-acids is 10% w/v.
Not Applicable
An aqueous solution of a single component.

SECTION III - PHYSICAL DATA

BOILING POINT: ~ 100°C
FREEZING POINT: < 0°C
VAPOUR PRESSURE: Unknown
VAPOUR DENSITY: Unknown
SOLUBILITY IN WATER: Complete in DI water at pH 8.5
APPEARANCE & ODOUR: Mobile pale yellow to amber-brown liquid with slight resinous odor.
SPECIFIC GRAVITY AT 30% : 1.08 +/- 0.01
PERCENT VOLATILE by VOLUME: < 1
EVAPORATION RATE: < 1

SECTION IV - FIRE & EXPLOSION

FLASH POINT: Not Applicable
EXTINGUISHING MEDIA: Not Applicable
SPECIAL FIRE FIGHTING PROCEDURES: None
UNUSUAL FIRE & EXPLOSION HAZARDS: None

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not Established
ORAL INGESTION: Not applicable – Food additive, very bitter therefore unpalatable.
EYE CONTACT: May be a mild irritant.
SKIN CONTACT: Prolonged contact could cause dermatitis in some individuals.
INHALATION: Not Volatile; not considered a primary route of contact.
NOTE: Substance is a modified hop extract which may be safely used in beer in accordance with FDA Food Additive Regulation 21 CFR 172.560(b-6)

EMERGENCY FIRST AID:

ORAL INGESTION: Not Applicable
EYE CONTACT: Wash with copious amounts of water.
SKIN CONTACT: Wash with warm, soapy water.
INHALATION: Not Applicable

SECTION VI - SPILL or LEAK PROCEDURE

Steps to be taken in case material is released or spilled: Apply commercial absorbents to spill and after removal, flush with water.

SECTION VII - SPECIAL PROTECTION

PROTECTIVE GLOVES: Rubber
EYE PROTECTION: Safety Glasses