

PRODUCT INFORMATION SHEET

PRODUCT NAME: YC-Iso

MANUFACTURER: Yakima Chief, Inc.
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DESCRIPTION:

YC-Iso is a clear pale yellow aqueous solution of the potassium salts of hop-derived *isoalpha*- acids. YC-Iso is derived from a pure resin CO₂ extract of hops through an aqueous process and is standardized at either 10 or 30% w/v by HPLC analysis. *Custom blends and formulations may be available upon request.*

APPLICATION:

YC-Iso gives you *precise control of the pure bitter flavor of the hops* in beer. It is designed to *economically add bitterness* into beer through post-fermentation injections. It allows for *greater flexibility* in brewing through post-fermentation bitterness adjustments (bitterness corrections, product differentiation...).

USE RATE CALCULATIONS:

In optimal dosing conditions the addition of 1L. of YC-Iso at 30% w/v per 100hL of finished beer will provide 20 bitter units. Use rates may vary depending on the point of addition and the desired hopping level.

DOSING METHODS:

Yakima Chief recommends the direct, undiluted injection of YC-Iso into the beer stream.

If an appropriate pump is not available, YC-Iso can be diluted with de-ionized water. The dilution factor will be determined according to the available dosing installation. Buffering agents are not required. In any case, YC-Iso should be added to beer after fermentation and primary filtration, at a point where there is good mixing but no foaming and ideally before a final filtration step. A good proportioning over min. 75% of the transfer time is recommended. YC-Iso injections should be made with a positive displacement pumping system. CO₂ backpressure should not be used. A 2-3 mm. diameter dip tube positioned in the middle of the beer stream and oriented against it provides excellent dispersion.

ADDITION PROCEDURE:

It is recommended that YC-IKE Plus be added to the kettle at a later time than the products it replaces, as this will give the best utilization of the iso-alpha acids. Typically, kettle addition of YC-IKE Plus at about 30 minutes before the end of kettle boil offers the best efficiency of the iso-alpha acids and hop oils.

Iso-alpha acid utilization through to the finished beer is 70-80% as measured by HPLC when YC-IKE Plus is added to the kettle. This will be dependent on brewing gravity, hopping rate and beer style. Generally, the relative gain in overall efficiency from CO₂ Hop Extract to YC-IKE Plus will be 75-100%.

CHARACTERISTICS:

FLAVOR of a solution in de-ionized water containing 30 mg/L. of iso -*alpha*-acids:

A fine bitterness with no other detectable flavors.

AROMA of a solution in de-ionized water containing 30 mg/L. of iso-alpha-acids:

None Detectable

GUSHING POTENTIAL IN BEER:

No increased potential.

PACKAGING:

20 L deltangular plastic containers

2 layers of 16 drums per pallet (640 L.)

STORAGE:

Unopened containers stored at 5-20°C for 12 months. A deposit may form on prolonged storage at low temperatures. This deposit dissolves on warming and shaking. Opened containers should be used as quickly as possible.