



TECHNICAL DATA INFORMATION SHEET

10/06

KALSEC[®]

KAE[®] 4/3A

Kettle Aroma Extract

Product Code: 46-30

DESCRIPTION

- A blend of di-hydroisoalpha acids, natural hop oil and resin components, and proprietary hop-derived dispersants in a glycerine carrier.
- Concentration specification is 25% ± 1.5% di-hydroisoalpha acids by HPLC.
- Contains approximately 5% – 15% hop oil components.

APPLICATIONS

- Adds organoleptic bitterness to beer – approximately 0.7 times that of iso-alpha acids.
- Will not cause formation of light-struck character, providing there is no source of unreduced iso-alpha acids introduced during the brewing process.
- May be used to control wort foaming by adding at the beginning of the brewkettle boil.
- May be used to provide hop aroma and flavor by adding in the last 10 minutes of the brewkettle boil.

HOW TO USE

- Designed for brewkettle addition, not recommended for post-fermentation addition.
- Heat to 40 – 50°C, then mix to make homogeneous and enhance flowability before use.
- Can achieve bitterness utilization in final beer of approximately 50% – 60%.

PRODUCT INFORMATION

- Product performance is not affected by its pH.
- Can be stored at a temperature range of 15°C – 35°C for the shelf life of the product.
- Should be part of an inventory control system, which will assure use in less than 18 months.

PATENTS

- Covered by U.S. patents: 5,073,396; 5,702,737 and 6,242,038.

Address:
P.O. Box 50511
Kalamazoo, MI 49005-0511

Telephone:
269-349-9711
800-323-9320

Fax:
Hop Sales & Lab
269-349-9055

ISO 9002 Registered:
Certificate No. 10156
BS EN ISO Cert. No. 8234

3713 West Main St.
Kalamazoo, MI 49006

Web:
www.kalsec.com

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