AromaExtract

❖ Overview

• **AromaExtract** is an enriched hop oil product derived from CO₂ extract.

• **AromaExtract** can be added early to the wort kettle as an antifoam agent. If added late in the boil, this product imparts a distinct hop aroma to beer.

• **AromaExtract** can help suppress microbial infections due to the presence of beta acids.

• **AromaExtract** does not contribute to the sensory bitterness of beer.

❖ Specifications

• **Description:** dark brown semisolid extract containing hop essential oils and waxes

• Hop oil*: 15 – 45 %

• Beta acids*: < 20 %

• Iso-alpha acids: < 0.5 %

• Alpha acids: < 0.5 %

• pH: 7.5 – 8.0

• Viscosity: 35 – 50 mPas at 50 °C (122 °F)

• Density: 1.0 g/ml at 20 °C (68 °F)

*dependent on variety and crop year
Product Use

AromaExtract is typically added to the kettle to achieve a characteristic hop aroma. An early addition aids in suppressing foam formation at the beginning of wort boiling.

Dosage

Actual dosage of AromaExtract will depend on the extract analysis (hop oil content), the time of the addition and the desired intensity of hop aroma.

Example: (hop oil content of 30 %)
Add 6.7 g/hl AromaExtract toward the end of the boil. This corresponds to a hop oil addition of 2.0 g/hl.

Addition

Pre-warming cans of AromaExtract is not necessary. Suspending punctured cans in the boiling wort will ensure that all of the extract is completely flushed out into the kettle.

If AromaExtract is added by means of automatic dosing units, it should be warmed to 45 °C (113 °F) and gently mixed to ensure perfect dosing.

Properties

- **Appearance**
  AromaExtract is a dark brown, semisolid or moderately viscous paste which becomes fluid when warmed.

- **Utilization**
  Actual utilization will vary from brewery to brewery due to differences in equipment and process conditions.

- **Flavor**
  AromaExtract provides hop character when added to the kettle. Late kettle additions impart a typical late hop aroma to the finished beer.

- **Quality**
  All Hopsteiner® products are processed in facilities which fulfill internationally recognized quality standards.

Packaging

AromaExtract can be packaged in cans and pails according to customer requirements:
- Cans: 0.5 to 4 kg (USA)
  0.5 to 4.2 kg (Germany)
- Pails: 4 to 20 kg (USA only)
- Jugs: 2.5 Gal. (USA only)
- Drums: 50 and 200 kg
• **Storage**

  * **AromaExtract** should be stored in sealed containers at temperatures < 10 °C (50 °F). Opened containers should be used within a few days.

• **Best Before Date**

  * **AromaExtract** is stable for six years from the date it was produced / packaged if stored under the recommended conditions.

• **Safety**

  * **AromaExtract** should be handled like regular CO₂ extract. Any product coming into contact with the skin should be immediately washed off with soap and water or an appropriate hand cleanser. If **AromaExtract** gets into the eyes, flush with copious amounts of water until clear and seek medical attention.
  
  For full safety information, please refer to the relevant Hopsteiner® safety data sheet.

**Analytical Methods**

• **Concentration of Hop Oil**

  The hop oil concentration can be measured using the following methods:
  - Analytica-EBC 7.10
  - ASBC Hops-13

• **Concentration of Beta Acids**

  Beta acids (as well as iso-alpha acids and alpha acids) can be measured using the following methods:
  - HPLC according to Analytica-EBC 7.8 or ASBC Hops-16 with the current ICS and ICE standards

**Technical Support**

We are pleased to offer assistance and advice on the full range of Hopsteiner® products:

 o copies of all relevant analytical procedures
 o Safety Data Sheets (SDS)
 o assistance with pilot or full-scale brewing trials
 o special analytical services

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