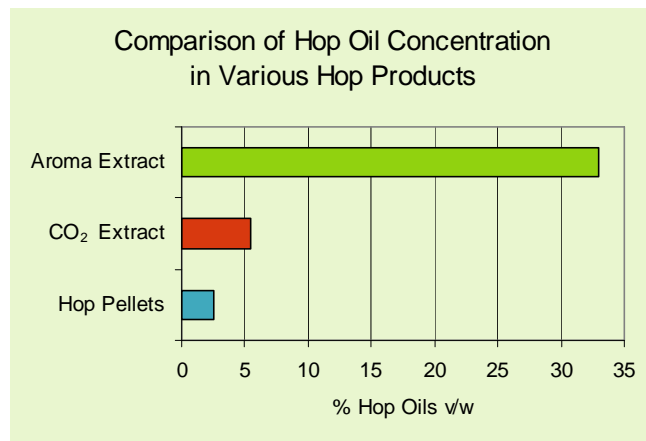


Aroma Extract

❖ Overview

- **Aroma Extract** is an enriched hop oil product produced from CO₂ hop extract.
- **Aroma Extract** is light stable and virtually free of hop bitter acids.

Aroma Extract can be added early to the kettle as an anti-foam or late in the boil to provide a distinct hop aroma to beer.



❖ Specification

- **Description:** A dark brown semi solid containing hop essential oils, fats and waxes. Actual composition will vary according to hop variety.
- **Hop oils:** 25 – 40 % (depending on variety)
- **Alpha acids:** < 0.1 %
- **Iso-alpha acids:** < 0,3 %
- **Beta acids:** < 10 %
- **Density:** 1.0 g/ml

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❖ Properties

□ Appearance

Dark brown, semi-solid or moderately viscous paste; becomes fluid when heated.

□ Flavor

Aroma Extract provides hop aroma when added to the kettle. Late addition will help enhance hop character of finished beer. The absence of any alpha acids or Iso-alpha-acids will help prevent the formation of light struck or “skunky” flavors.

□ Quality

All Hopsteiner® products are produced in plants accredited to internationally accepted quality standards.

❖ Packaging

Aroma Extract can be packaged into a range of cans (up to 4 kg), 20 kg pails or 200 kg drums

❖ Product Use

Aroma Extract is typically added to the brew kettle.

□ Dosage

Actual dosage will depend on the extract analysis, time of addition and degree of hop character required.

Example: (Hop oil content of 30 %)

Add 6.5 g/hl **Aroma Extract** toward the end of the boil. This corresponds to a hop oil addition of 2 g/hl.

□ Addition

For ease of use, **Aroma Extract** should be warmed to 50°C (120°F) to liquefy product.

□ Storage

In order to preserve the essential oils, **Aroma Extract** should be stored at < 10°C (50°F) in the original unopened container.

□ Best Before Date

Aroma Extract is stable 2 years from date of production under the recommended storage conditions.

□ Safety

Aroma Extract should be handled like normal CO₂ Extract. Any material coming into contact with skin should be washed off immediately. If **Aroma Extract** gets into the eyes, irrigate with excess water until clear and seek immediate medical attention.

For full safety information please see the relevant Steiner material safety data sheet.

❖ Analytical Methods

□ Concentrations of residual α -, β - and Iso- α -acids

Residual α -, β - and Iso- α -acids can be measured by

- HPLC, using the current international hop standards
- EBC 7.9 HPLC methods.

❑ Concentrations of Hop oils

Hop oil concentration can be measured by the following methods:

- IOB 6.3 method
- ASBC hops-13

❖ Technical Support

We will be pleased to offer help and advice on the full range of Hopsteiner® products:

- ❑ Copies of all relevant analytical procedures
- ❑ Material Safety Data Sheets (MSDS)
- ❑ Assistance with pilot or full brewery trials
- ❑ Specialist analytical services

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