



HAP FFSH in ETOH

GENERAL

HAP products are a hop extract in an ethanol carrier, produced by a proprietary physical separation process. It is considered as GRAS (FEMA no. 2580 – Hops, oil). HAP products are exclusively supplied worldwide by BarthHaas.

HAP products are aroma products that provide a defined aroma characteristic. This data sheet is suitable for all of the products listed below:

- HAP F&H Blends (code 126248)
- HAP F/H blend 40/60 (code 126234
- HAP FGC (code 126231)
- HAP FL Extra Linalool (code 126255)
- HAP Floral PG (code 126221)
- HAP Herbal PG (code 126222)
- HAP LAB436 (code 126304)
- HAP Floral FFSH in ETOH

CHARACTERISTICS

HAP products are 100% soluble in beer (or other beverages). In general, PHA^{*} and HAP products offer an alternative means of adding hop aroma independent of any other product or process and of annual crop variations. They can complement traditional means of adding hop aroma by kettle addition. Specifically, HAP products can impart beer flavor attributes such as citrussy, floral, herbal or spicy characteristics. They enhance pleasant existing flavors in the beer/soft drink and can mask some off-flavors. The following Classic HAP products are available:

Product specifications: Available on request.

PRODUCT USE

Our HAP products are completely soluble in beer and are intended for addition to fined or filtered beers. The required amount of HAP may be metered directly into the beer stream during transfer to bright beer tank or other appropriate vessel. A usage rate of HAP per hectoliter normally is about 10 ml but might vary between 5 – 40 ml according to the desired intensity of aroma. We recommend laboratory scale trials to determine which concentration gives the desired effect. This evaluation can be carried out on bottles of 250 to 500 ml capacity.

On a large scale, HAP products are used as a post fermentation addition to finished beer, where 100% utilization is feasible. HAP products are lightstable and therefore can be used to introduce hop aroma into a beer brewed using exclusively downstream products such as Tetrahop Gold[®] and Redihop[®]. These products may be added without prior dilution to beer either before or after the final filtration preferably by metered injection into a turbulent beer stream during transfer. They can also be added to bright beer without any increase in haze or deterioration in foam stability. If possible the pump should be adjusted to deliver the HAP over approx. 95% of the total transfer time.





TRIAL GUIDE

We recommend benchtop trials to determine which concentration gives the desired effect. To get a better initial understanding for the effect of individual HAP products and the required dose rate, we recommend dosing directly into a glass of beer. For more accurate results, we suggest following this up with dosing into bottles as explained below. The rate for initial tasting trials should be approximately 10 mL/hL of the HAP as supplied. HAP products can be dosed directly using a micropipette or syringe. For example, a 330 mL bottle, a 33µL amount of HAP gives a dose rate equivalent to 10mL/hL. Chill the beer to normal drinking temperature. Open and introduce the required volume of HAP in the headspace of the beer bottle and reclose the bottle. Invert the bottle several times to ensure mixing and chill again for at least two hours before opening and tasting.

SPECIAL PROPERTIES OF HAP PRODUCTS

The HAP products have the following properties:

- Fully soluble: utilization is 100% because of full solubility in beverages.
- No negative impact on beer quality: Do not increase beer haze or reduce beer foam stability.
- Easy handling: Provided as standardized solution for direct dosing.
- Light stability: free of hop α-acids; can be used with any packaging type.
- Ideal for brand diversification: differentiate existing products or create new ones.

PACKAGING

HAP products are available in 1 and 5 L aluminum flasks. Larger package units are available on request

STORAGE AND BEST-BY RECOMMENDATION

HAP products are stable in unopened containers for at least 24 months. Store at 0-20 °C (32-68 °F) in high-grade stainless steel, glass, aluminum or lacquered steel drums. This HAP product is diluted in EtOH: it is a highly flammable liquid, keep away from heat/ sparks/open flames/hot surfaces

LABELLING

"Natural flavoring" or "flavoring"

SAFETY

Please refer to our SDS which can be downloaded on our website.

TECHNICAL SUPPORT

We will be pleased to offer help and advice on the use of HAP products in brewing/soft drink production.

E-Mail: Brewingsolutions@barthhaas.de