



Centennial Hop Extract - 150 gma



Centennial hop extract has an alpha acid content of 48.88%
100% Natural with no chemical modifications.

The benefits of BSG Hop Extracts include:

- Variety-specific character preserved
- Consistent bittering
- Increased hop utilization
- Money saving
- Increased kettle yield
- Space saving

Utilization: 35% in a 60 minute boil

Formula:

The following formula can be used to calculate “estimated” bitterness when using CO2 hop extract. For results consistent with typical bittering calculations, the extract % alpha and 35% utilization can be included in the standard bittering calculation of any brewery.

$$\text{Required gma} = \frac{(\text{desired wort IBU}) (\text{hL volume wort @ end of boil})}{(\text{utilization \% expressed in decimal form}) (10)}$$

- 1 hectoliter = 100 liters
- 1 hectoliter = 0.852 barrels
- 1 barrel = 1.173 hectoliters
- 1 IBU = 1 mg iso-alpha per 1 liter of beer
- 1 X 150 gma can has 150,000 mg of alpha acid

Example: 65 desired IBU in 15 BBL wort, given 35% utilization

$$\text{Required gma} = \frac{(65 \text{ IBU}) (17.55 \text{ hL})}{(0.35) (10)}$$

$$\text{Required gma} = \frac{1140.75}{3.5}$$

$$\text{Required gma} = 325.93$$

Notes:

- Unit of measure is grams of alpha (gma). Available in 150 gma and 300 gma can sizes
- One 150 gma can of extract, boiled for 45 minutes (+) will provide 30 IBU's** in a 15 barrel batch of wort. Each 150 gma can contains the extract from 2-6 pounds of hops.
- **This is an approximation only. Final bitterness may vary based on individual brew house performance. Actual usage rate should be determined through trials and/or laboratory analysis.