

LUPOMAX™ Hop Pellets

General Use Guide

Product Description:

LUPOMAX™ pellets are an enriched-lupulin hop product that provides enhanced hop flavor and aroma to beer while reducing pellet use and beer loss. LUPOMAX™ pellets are ideal for dry hop addition on the cold side or to the brewhouse whirlpool imparting desirably impactful hop flavors to your beer. Raw hop materials are selected through our exclusive Sensory Plus™ process each crop year to ensure that LUPOMAX™ products meet or exceed performance expectations. Highly controlled conditions and low temperatures protects the sensitive hop components, decreases vegetal and grassy attributes, and provides a standardized product that will provide reliable results, year after year.

Product Specifications¹:

- Description: Cylindrical pellets of approximately 6 mm (0.24 inch) diameter
- Consistency: A formed solid that will generally disintegrate into a powder during use
- Color: Ranges from dark green to olive green (variety dependent)
- α-Acids: Standardized to meet a predetermined and narrow specification range (variety dependent)
- β-Acids: Variety dependent
- Hop oils: Variety dependent
- Moisture: 7 - 12% (variety dependent)

Available Varieties from Crop Year 2019:

Citra®, Mosaic®, and SABRO®

COAs: Crop Year 2019		
Variety	Average Oil (mL/100 g)	Alpha (%)
LUPOMAX™ Citra®	2.3	18.5
LUPOMAX™ Mosaic®	2.0	17.5
LUPOMAX™ SABRO®	1.7	19.5

¹ Further information on hop varieties is available at www.johnihaas.com.

Dosing:

To ensure optimal flavor and aroma utilization, LUPOMAX™ pellets are designed be added during dry hopping on the cold side or to the brewhouse whirlpool. Timing of addition can influence final beer flavor and aroma; brewer's discretion will dictate dosage timing and addition rate.

As a guideline, LUPOMAX™ pellets are designed to be used at a replacement rate of 70%, relative to standard Type 90 (T90) pellets. In other words, if a recipe would normally call for 1 lbs. per barrel of T90 hop pellets, it is recommended to use 0.7 lbs. per barrel of LUPOMAX™ enriched-lupulin pellets.

Storage and Best-By Recommendation:

LUPOMAX™ pellets should be stored cold at 0 – 5 °C (32 – 41 °F) and are best when used within three years after processing. Optionally, LUPOMAX can be stored at temperatures below freezing, < 0 °C (< 32 °F). If stored at freezer temperatures the pellets should be used within five years. Foils, once opened, should be used within a few days to avoid deterioration of hop resins and essential oils.