## FROZEN FRESH HOPS

## PRODUCT OVERVIEW SHEET





## **OVERVIEW**

Fresh hop ales have long since been one of the most celebratory beers in the craft beer community. Brewed with whole wet cones straight from the bine and into the kettle within 36 hours of harvest, they represent hops in their most natural form while honoring their rich agricultural roots.

With the high perishability of an unprocessed ingredient, fresh hops are difficult to access for brewers further from the farms. We needed to create a more flexible and sustainable fresh hop product for the global brewing community. Focused on innovation and creative solutions, we developed a way to offer Frozen Fresh Hops in partnership with Wyckoff Farms who is skilled in the art producing and preserving quality, frozen agricultural products.

YCH's Frozen Fresh Hops are raw, un-kilned, flash frozen whole cone hops produced in a state-of-the-art BRC-certified food processing facility. Unlike traditional freezing, flash freezing retains the delicate nuances of un-kilned hops by protecting lupulin gland integrity, preserving fresh hops from both a physical and aromatic perspective. The result is a product that perfectly preserves the magic of fresh hop season with better storability, higher quality upon arrival and logistical flexibility both with shipping and brewhouse operations.

AROMA - YCH has conducted lab and sensory analysis on trial Frozen Fresh Hop beers to determine that brewers can expect the same unique field to pint aromas and flavors if stored and brewed using Fresh Hop best practices. Like Fresh Hops, Frozen Fresh Hops often deliver unexpected flavors unique to each growing season that make fresh hop ales a special celebratory beer style. They offer a diversity of typical and non-typical hop aromas including fresh citrus, pine, and tropical fruits, as well as jolly rancher, ripe berry, green grass and floral.

TIMING & AVAILABILITY - Frozen Fresh Hops are still subject to the unpredictable timing of harvest and can vary by variety. However, as a frozen product, this offers more logistical flexibility with both storage and shipping. We are able to store Frozen Fresh Hops at subfreezing temperatures using local facility partnerships until all varieties have been harvested. This allows us the time to work with brewers to coordinate the most cost-effective and appropriate shipping options.

SHIPPING - Frozen Fresh Hops must remain in their frozen state to ensure you receive a quality product. They must be shipped using sub-freezing containers and trucks. We have partnered with local shipping providers, facilities and distributors to provide you with the most cost-effective options and allow you to experience the full benefits of sourcing a frozen product. We recommend coordinating your shipments with your regional sales team to determine a shipping option that works best for your brewery.

**STORAGE** - In order to preserve the quality, Frozen Fresh Hops must be stored between 0°F and 14°F (-18°C and -10°C). If stored at any temperatures between 14°F and 35°F (-10°C and 2°C), they must be used within 48 hours. YCH will store and ship at the appropriate subfreezing temperatures, however, we recommend coordinating your brewhouse operations with your shipment to ensure timely usage.

APPLICATION & USAGE - Frozen Fresh Hops can be used ideally in whirlpool or hop-back setups but are also great for dry hopping. Application and usage recommendations are the same as traditional fresh hops. We recommend 3 to 6 times more hops than traditional whole leaf hops or T90 hop pellets. This ratio can vary but should always be greater than 1:1 due to water retention.

| 2021 AVAILABILITY      | PRICE/LB*        | AROMA DESCRIPTORS                                |
|------------------------|------------------|--|
| AZACCA® BRAND adha 483 | Varies by region | Berry, Citrus, Pine, Stone Fruit, Tropical       |
| CASCADE                | Varies by region | Floral, Grapefruit, Grassy, Herbal, Pine         |
| CITRA® BRAND HBC 394   | Varies by region | Citrus, Stone Fruit, Tropical, Woody             |
| MOSAIC® BRAND HBC 369  | Varies by region | Berry, Citrus, Stone Fruit, Tropical             |
| SIMCOE® BRAND ycr 14   | Varies by region | Citrus, Grapefruit, Stone Fruit, Tropical, Woody |

<sup>\*</sup>Contact your local Regional Sales Manager for pricing