



WILLAMETTE VALLEY HOPS, LLC

HOP VARIETY DATA SHEET

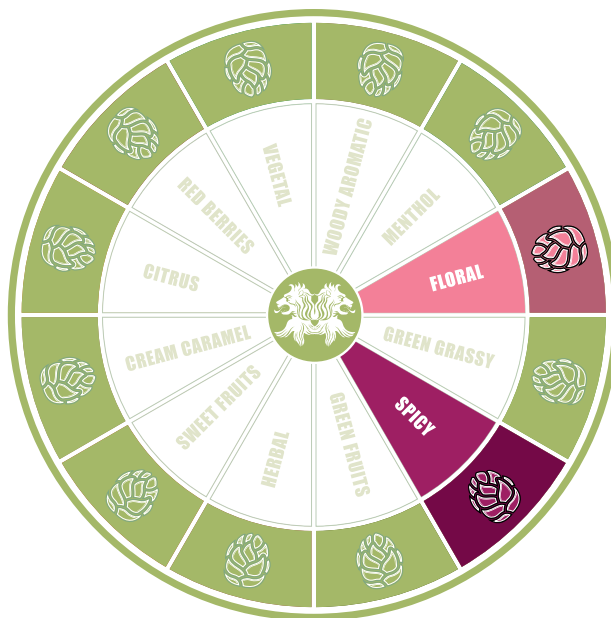


Crystal

U.S. AROMA HOP

Crystal is a triploid variety developed from the German aroma hop variety Hallertauer Mittlefrüh with primary contributions from Cascade, Brewer's Gold and Early Green. Released in 1993 from the USDA breeding program, Crystal has become popular in U.S. craft brewing as a triploid Hallertauer.

Pedigree	Half-sister of Mt. Hood and Liberty derived from Hallertau Mittlefrüh and other crosses
Aroma/Flavor	Mild, Spicy and Floral
Alpha Acids*	4.0 - 6.0%
Beta Acids	5.0 - 6.7%
Cohumulone	20 - 26% of alpha acids
Total Oil	0.8 - 2.1 ml/100g
Myrcene	40 - 65% of total oil
Humulene	18 - 24% of total oil
Caryophyllene	4 - 8% of total oil
Farnesene	<1% of total oil
Storage Stability	Very poor



Varieties subject to availability. Contact your Territory Manager to place your order.

Jim Wolf • Central West
jim.wolf@wvhops.com
503.800.1448

Eric Bougie • Canada
eric.bougie@wvhops.com
514.621.9309

Northern California
hops@wvhops.com
503.633.4677

Paul Allard • East Coast
paul.allard@wvhops.com
207.807.7074

Ken Moon • Central East
Southern California
moon@wvhops.com
503.400.5855

Brandon Nguyen • Northwest
brandon.nguyen@wvhops.com
541.908.3502