AROMA EVALUATION

<table>
<thead>
<tr>
<th>Citrusy</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>Fruity</td>
<td>3</td>
</tr>
<tr>
<td>Sugar-like</td>
<td>2</td>
</tr>
<tr>
<td>Floral</td>
<td>1</td>
</tr>
<tr>
<td>Resinous</td>
<td>2</td>
</tr>
<tr>
<td>Herbal</td>
<td>1</td>
</tr>
<tr>
<td>Spicy</td>
<td>0</td>
</tr>
</tbody>
</table>

AROMA SPECIFICATION
black pepper, onion, light citrus

GENETIC ORIGIN
A super high alpha variety developed in the Yakima valley as part of the Hopsteiner breeding program.

AGRONOMIC ASPECTS

GROWING
- Yield (kg/ha): 2,680 - 3,000
- Yield (lbs/acre): 2,400 - 2,700
- Maturity: Late
- Main Growing Country: USA
- Acreage (ha): 1432

RESISTANCE AGAINST DISEASES
- Powdery mildew: Susceptible
- Aphid: Susceptible

CHEMICAL INGREDIENTS

BITTER COMPONENTS
- Alpha-Acid %: 15.0 - 17.0
- Beta-Acid %: 4.0 - 6.0
- Co-Humulone % rel.: 27 - 35
- Hard Resins: Alpha-Acid: 0.18 - 0.50

POLYPHENOLES
- Xanthohumol (EBC 7.7): 0.5 - 0.9

AROMA COMPONENTS
- Total Oils (ml/100g): 2.5 - 3.5
- Beta-Caryophyllene: Humulene: 0.57
- Farnesene % of total Oil: 0.00 - 1.00
- Linalool % of total Oil: 0.4 - 0.6
- Linalool: Alpha-Acid: 0.03 - 0.04

HOP ALTERNATIVES
BREWHOUSE
Galena, Chinook, Nugget

HOPS HOTLINE
800.339.8710

Last Changed: 01/09/2020