

## The Hop Chronicles | Sabro LUPOMAX (2020) - 5.6%

### American Pale Ale

Author: Paul Amico

Type: All Grain

IBU : 43 (Tinseth)  
 BU/GU : 0.76  
 Colour : 12 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.043  
 Original Gravity : 1.056  
 Final Gravity : 1.013

### Fermentables (1.45 kg)

1.207 kg - Lamonta: Pale American Barley Malt...  
 241 g - Vanora: Vienna-style Barley Malt 13.8...

### Hops (34.3 g)

45 min - 1.4 g - Sabro LUPOMAX - 19% (12 IBU)  
 20 min - 2.3 g - Sabro LUPOMAX - 19% (13 IBU)  
 10 min - 2.7 g - Sabro LUPOMAX - 19% (9 IBU)  
 2 min - 12.8 g - Sabro LUPOMAX - 19% (10 IBU)

### Dry Hops

4 days - 15.1 g - Sabro LUPOMAX - 19%

### Miscellaneous

Mash - 0.82 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 0.51 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.51 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.22 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 3.24 g - Gypsum (CaSO4)  
 ^ The Malt Miller (UK) CHE-03-004  
 Mash - 0.6 ml - Lactic Acid 80% 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3

### Yeast

0.3 pkg - Imperial Yeast Flagship A07

### 01 Brouwpunt 5L (60min) (rev 4)

Batch Size : 5.6 L  
 Boil Size : 7.76 L  
 Post-Boil Vol : 5.96 L

Mash Water : 4.34 L  
 Sparge Water : 4.93 L  
 Boil Time : 60 min  
 Total Water : 9.27 L



12 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

03 - High/Moderate Fermentability  
 72.9 °C - Strike Temp  
 66.7 °C - 60 min - Temperature

### Fermentation Profile

Ale  
 18.9 °C - 9 days - Primary

### Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...  
 Ca 93 Mg 15 Na 49 Cl 50 SO 250

SO/Cl ratio: 5  
 Mash pH: 5.4  
 Sparge pH: 6

### Measurements

Mash pH:  
 Boil Volume:  
 Pre-Boil Gravity:  
 Post-Boil Kettle Volume:  
 Original Gravity:  
 Fermenter Top-Up:  
 Fermenter Volume:  
 Final Gravity:  
 Bottling Volume:

### Recipe Notes

Water Profile: Ca 92 | Mg 1 | Na 10 | SO4 153 | Cl 50