

## Thunderstorm - 4.9%

American Pale Ale 01 Brouwpunt 5L (30min) (rev 4) Author: AdrianDBW@homebrewinguk.com Batch Size : 5.6 L Boil Size : 6.86 L Post-Boil Vol : 5.96 L Type: All Grain IBU Mash Water : 47 (Tinseth) : 3.71 L BU/GU : 0.94 Sparge Water : 4.46 L **10 EBC** : 30 min Colour : 10 EBC Boil Time Carbonation : 2.3 CO2-vol Total Water : 8.17 L Pre-Boil Gravity : 1.043 Brewhouse Efficiency: 71.8% : 1.050 Mash Efficiency: 73.3% Original Gravity Final Gravity : 1.013 Mash Profile Fermentables (1.24 kg) 01 One Step Mash (30 min) 71 °C - Strike Temp 1.123 kg - Pale Ale Malt 5.5 EBC (90.9%)  $65~^{\circ}\text{C}$  - 30~min - Temperature ^ The Malt Miller (UK) MAL-00-042 112 g - Carahell 25.5 EBC (9.1%) Fermentation Profile Hops (72.1 g) 01 Ale + DR + Conditioning 15 min - 22.1 g - Whitbread Golding Variety (... 18 °C - 10 days - Primary 5 min - 10.8 g - Amarillo (T90) - 8.4% (11 IBU) 21 °C - 4 days - Diacetyl rest ^ The Malt Miller (UK) HOP-05-007 18 °C - 14 days - Carbonation 18 °C - 28 days - Conditioning Hop Stand Water Profile 10 min hopstand @ 80 °C 10 min - 11.2 g - Bullion - 7.5% (3 IBU) 02 NL Spa Reine Flat Mineral Water (www.ah.nl... Ca 83 Mg 8 Na 22 Cl 67 SO 155 HCO 38 Dry Hops 4 days - 14 g - Amarillo (T90) - 8.4% SO/Cl ratio: 2.3 ^ The Malt Miller (UK) HOP-05-007 Mash pH: 5.39 4 days - 14 g - Bullion - 7.5% Sparge pH: 6 Miscellaneous Measurements Mash - 0.24 g - Baking Soda (NaHCO3) ^ Lot # 41190621/3 Mash pH: ^ Brouwstore (NL) 003.106.2 Mash - 1.74 g - Calcium Chloride (CaCl2) 33 %... Boil Volume: ^ Lot # 115038

^ Brouwstore (NL) 055.035.0

Mash - 0.23 g - Canning Salt (NaCl)

^ Albert Heijn (NL)

Mash - 0.5 g - Epsom Salt (MgSO4)

^ Lot # /2119000091

^ Brouwstore (NL) 055.027.7 Mash - 1.86 g - Gypsum (CaSO4)

^ The Malt Miller (UK) CHE-03-004 Mash - 0.3 ml - Lactic Acid 80% 80%

^ Lot # 20200213

^ Brouwstore (NL) 003.002.3

Yeast

0.6 pkg - Crossmyloof PIA

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume: