Panhead - Quickchange XPA (clone) - 4.7%

Specialty IPA
Author: Pig Den Brewing

Type: All Grain

IBU	:	66 (Tinseth)
BU/GU	:	1.4
Colour	:	8 EBC
Carbonation	:	2.3 CO2-vol

Pre-Boil Gravity	:	1.036
Original Gravity	:	1.047
Final Gravity	:	1.011

Fermentables (1.16 kg)
577 g - Pale Ale Malt 6 EBC (49.9%)
^ Lot # 694-201130-111430-176081-1/1
^ The Malt Miller (UK) MAL-00-010
463 g - Pilsner 3.5 EBC (40.1%)
^ The Malt Miller (UK) MAL-00-074
116 g - Wheat Malt 4 EBC (10%)
^ Lot # 694-201130-111430-176081-1/1
^ The Malt Miller (UK) MAL-04-004

Hops (50.6 g)
15 min - 9.1 g - Mosaic - 14.2% (36 IBU)
5 min - 9.1 g - Galaxy - 15.75% (21 IBU)

Hop Stand
30 min hopstand @ 75 °C
30 min 75 °C - 10 g - Citra - 14.1% (8 IBU)

Dry Hops
4 days - 11.2 g - Citra - 14.1%
4 days - 5.6 g - Galaxy - 15.75%
4 days - 5.6 g - Mosaic - 14.2%

Miscellaneous
Mash - 0.46 g - Epsom Salt (MgSO4)
^ Lot # /2119000091
^ Brouwstore (NL) 055.027.7
Mash - 2.32 g - Gypsum (CaSO4)
^ The Malt Miller (UK) CHE-03-004
Mash - 0.8 ml - Lactic Acid 80% 80%
^ Lot # 20200213
^ Brouwstore (NL) 003.002.3
Sparge - 1 ml - Lactic Acid 80% 80%
^ Lot # 20200213
^ Brouwstore (NL) 003.002.3

Yeast
0.5 pkg - Fermentis Safale American US-05
^ Lot # 52766 1049 269
^ The Malt Miller (UK) YEA-02-025

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

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

Mash Water	:	3.47 L
Sparge Water	:	5.52 L
Boil Time	:	60 min
Total Water	:	8.99 L

8 EBC

Brewhouse Efficiency: 71.8%
Mash Efficiency: 73.3%

Mash Profile
Single Infusion, Full Body, No Mash Out
75.4 °C - Strike Temp
68.9 °C - 45 min - Mash In

Fermentation Profile
Imported
19.4 °C - 4 days - Primary
19.4 °C - 10 days - Secondary
18.3 °C - 30 days - Conditioning

Water Profile
NL Hoofddorp Rein Tap Water (2020-Q3 WQR) (St...
Ca 100 Mg 15 Na 68 Cl 92 SO 213

SO/Cl ratio: 2.3
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

0 min addition I have added as a hop stand