

## Brewdog - #002 Punk IPA 2010 (clone) v2 - 5.8%

### American Pale Ale

Author: Brewdog

Type: All Grain

IBU : 36 (Tinseth)  
 Colour : 10 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.039  
 Original Gravity : 1.053  
 Final Gravity : 1.009

### Fermentables (1.35 kg)

1.247 kg - Extra Pale Malt 3 EBC (92.1%)  
 ^ The Malt Miller (UK) MAL-00-057  
 77 g - Premium English Caramalt 60 EBC (5.7%)  
 ^ The Malt Miller (UK) MAL-01-033  
 30 g - Sugar, Table (Sucrose) 2 EBC (2.2%)  
 ^ Albert Heijn (NL)

### Hops (73.8 g)

60 min - 2.3 g - Chinook - 11.3% (13 IBU)  
 60 min - 1.5 g - Willamette - 5.3% (4 IBU)  
 30 min - 2.2 g - Chinook - 11.3% (9 IBU)  
 30 min - 1.5 g - Willamette - 5.3% (3 IBU)  
 5 min - 2.9 g - Chinook - 11.3% (3 IBU)  
 5 min - 1.5 g - Nelson Sauvin - 10.7% (2 IBU)  
 5 min - 1.5 g - Simcoe - 13.3% (2 IBU)  
 5 min - 1.5 g - Willamette - 5.3% (1 IBU)

### Dry Hops

Day 5 - 5.9 g - Nelson Sauvin - 10.7%  
 5 days - 14.7 g - Chinook - 11.3%  
 5 days - 11.8 g - Cascade - 5.5%  
 5 days - 11.8 g - Simcoe - 13.3%  
 5 days - 11.8 g - Willamette - 5.3%  
 5 days - 2.9 g - Amarillo - 8.4%

### Miscellaneous

Mash - 0.56 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 1.6 ml - Lactic Acid 80% 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3

### Yeast

0.5 pkg - Fermentis Safale American US-05  
 ^ Lot # 52300 0623 225  
 ^ 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 : 3.97 L  
 Sparge Water : 5.18 L  
 Boil Time : 60 min  
 Total Water : 9.15 L

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

High fermentability  
 72.1 °C - Strike Temp  
 66 °C - 75 min - Temperature

### Fermentation Profile

Ale  
 19 °C - 14 days - Primary

### Water Profile

NL Hoofddorp Rein Tap Water (2020-Q1 WQR) (St...  
 Ca 41 Mg 15 Na 67 Cl 71 SO 68

SO/Cl ratio: 1  
 Mash pH: 5.4

### Measurements

Mash pH:

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume:



10 EBC

### Recipe Notes

Change Ahtanum for Willamette.