

## AnOtter Cascade Pale Ale - 5.8%

### American Pale Ale

Author: The Thirsty Otter

Type: All Grain

IBU : 46 (Tinseth)  
 BU/GU : 0.85  
 Colour : 16 EBC  
 Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.041  
 Original Gravity : 1.054  
 Final Gravity : 1.010

### Fermentables (1.4 kg)

1.35 kg - Swaen Vienna 12 EBC (96.4%)  
 ^ Brouwmaatje (NL) BM-SWAEN@VIENNA  
 50 g - Chateau Biscuit 45 EBC (3.6%)  
 ^ Brouwmaatje (NL) BM-BL.051.098.2/1

### Hops (25 g)

60 min - 10 g - Cascade (T90) - 7.5% (36 IBU)  
 ^ Brouwmaatje (NL) BM-BL.053.148.3/100  
 5 min - 10 g - Cascade (T90) - 7.5% (9 IBU)  
 ^ Brouwmaatje (NL) BM-BL.053.148.3/100

### Hop Stand

10 min hopstand @ 80 °C  
 10 min - 5 g - Cascade (T90) - 7.5% (1 IBU)  
 ^ Brouwmaatje (NL) BM-BL.053.148.3/100

### Miscellaneous

Mash - 0.27 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 1.98 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.26 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 0.57 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 2.12 g - Gypsum (CaSO4)  
 ^ The Malt Miller (UK) CHE-03-004

### Yeast

0.9 pkg - Fermentis Saflager Lager W-34/70  
 ^ The Malt Miller (UK) YEA-02-032

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

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

Mash Water : 4.2 L  
 Sparge Water : 5.02 L  
 Boil Time : 60 min  
 Total Water : 9.22 L



16 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

01 One Step Mash (90 min)  
 73.3 °C - Strike Temp  
 67 °C - 90 min - Temperature

### Fermentation Profile

01 Ale + DR + Conditioning  
 20 °C - 7 days - Primary  
 21 °C - 7 days - Diacetyl rest  
 2 °C - 1 days - Cold crash  
 18 °C - 14 days - Carbonation  
 18 °C - 28 days - Conditioning

### Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...  
 Ca 84 Mg 8 Na 22 Cl 67 SO 156 HCO 38

SO/Cl ratio: 2.3  
 Mash pH: 5.38  
 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

Original recipe by John J. Palmer, beefed up a bit.  
 Malt bill adapted to local available.