

## Miraculix Best - 4.5%

### Best Bitter

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Type: All Grain

IBU : 29 (Tinseth)  
 BU/GU : 0.7  
 Colour : 12 EBC  
 Carbonation : 1.6 CO2-vol

Pre-Boil Gravity : 1.029  
 Original Gravity : 1.039  
 Total Gravity : 1.041  
 Final Gravity : 1.007

### Fermentables (914 g)

684 g - Maris Otter 5.5 EBC (74.8%)  
 ^ The Malt Miller (UK) MAL-00-038  
 92 g - 10 min - Boil - Golden Syrup 0 EBC (10...  
 ^ Tjin's Toko, Eerste van der Helstraat 64, 1...  
 92 g - Torrified Wheat 3.9 EBC (10.1%)  
 ^ The Malt Miller (UK) MAL-03-006  
 46 g - Crystal Malt 150 EBC (5%)  
 ^ The Malt Miller (UK) MAL-01-008  
 15 g - Bottling - Sugar, Table (Sucrose) 2 EBC  
 ^ Albert Heijn (NL)

### Hops (15.3 g)

30 min - 3.1 g - Cobb - 6.7% (9 IBU)  
 30 min - 2.4 g - Magnum - 10.7% (11 IBU)  
 ^ The Malt Miller (UK) HOP-06-009  
 10 min - 4.9 g - Cobb - 6.7% (7 IBU)

### Hop Stand

10 min hopstand @ 80 °C  
 10 min - 4.9 g - Cobb - 6.7% (2 IBU)

### Miscellaneous

Mash - 0.25 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 0.66 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.66 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.01 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 1.3 g - Gypsum (CaSO4)  
 ^ The Malt Miller (UK) CHE-03-004  
 Mash - 0.1 ml - Lactic Acid 80% 88%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3

### Yeast

0.3 pkg - Imperial Yeast Pub A09

### 01 Brouwpunt 5L (30min) (rev 4)

Batch Size : 5.6 L  
 Boil Size : 6.86 L  
 Post-Boil Vol : 5.96 L

Mash Water : 2.19 L  
 Sparge Water : 5.49 L  
 Boil Time : 30 min  
 Total Water : 7.68 L



12 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

Multi-step Mash (125 min)  
 59.7 °C - Strike Temp  
 55 °C - 10 min - Temperature  
 62 °C - 45 min - Temperature  
 72 °C - 45 min - Temperature  
 75 °C - 15 min - Temperature

### Fermentation Profile

01 Ale + DR + Conditioning  
 18 °C - 10 days - Primary  
 21 °C - 4 days - Diacetyl rest  
 18 °C - 14 days - Carbonation  
 18 °C - 28 days - Conditioning

### Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...  
 Ca 55 Mg 15 Na 46 Cl 75 SO 150

SO/Cl ratio: 2  
 Mash pH: 5.37  
 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:

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## Recipe Notes

Target: IBU = 30, OG = 1.040, FG = 1.010.