

## Bitterexit - 4.5%

### Best Bitter

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Type: All Grain

IBU : 40 (Tinseth)  
 BU/GU : 0.86  
 Colour : 15 EBC  
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.034  
 Original Gravity : 1.047  
 Final Gravity : 1.013

### Fermentables (1.15 kg)

983 g - Pale Ale Malt 8.5 EBC (85.4%)  
 ^ Lot # 20210909  
 ^ Brouwmaatje (NL) 051.011.5  
 112 g - Wheat Malt 5.5 EBC (9.7%)  
 ^ Lot # 20210909  
 ^ Brouwmaatje (NL) 051.125.3  
 56 g - Caramunich I 101 EBC (4.9%)

### Hops (19.5 g)

75 min - 10.5 g - Goldings - 5.6% (31 IBU)  
 ^ Hopeye (GB) HE-50G-HOPS-GOLDINGS (50 grams)  
 15 min - 4.5 g - Goldings - 5.6% (6 IBU)  
 ^ Hopeye (GB) HE-50G-HOPS-GOLDINGS (50 grams)  
 5 min - 4.5 g - Goldings - 5.6% (3 IBU)  
 ^ Hopeye (GB) HE-50G-HOPS-GOLDINGS (50 grams)

### Miscellaneous

Mash - 0.31 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 0.81 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.81 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.24 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 1.6 g - Gypsum (CaSO4)  
 ^ The Malt Miller (UK) CHE-03-004  
 Mash - 0.5 ml - Lactic Acid 80% 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3

### Yeast

0.4 pkg - Lallemend (LalBrew) London  
 ^ Brouwmaatje (NL) BM-BL.050.616.2

### 01 Brouwpunt 5L (75min) (rev 4)

Batch Size : 5.6 L  
 Boil Size : 8.21 L  
 Post-Boil Vol : 5.96 L

Mash Water : 3.45 L  
 Sparge Water : 5.98 L  
 Boil Time : 75 min  
 Total Water : 9.43 L



15 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

01 One Step Mash (60 min)  
 72.1 °C - Strike Temp  
 66 °C - 60 min - Temperature  
 78 °C - 2 min - Mash out

### 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](http://www.ah.nl)...  
 Ca 55 Mg 15 Na 46 Cl 75 SO 150

SO/Cl ratio: 2  
 Mash pH: 5.34  
 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

Target: ABV = 5.0 %, IBU = 41.0, EBC = 19.0, OG = 1.046, FG = 1.010.

<https://www.twortwat.nl/recepten?id=327>