

## Gungnir Golden Ale - 4.1%

### British Golden Ale

Author: Miðgarð Brewhouse (Cawood, North York...

Type: All Grain

IBU : 34 (Tinseth)  
 BU/GU : 0.79  
 Colour : 10 EBC  
 Carbonation : 2.5 CO2-vol

Pre-Boil Gravity : 1.032  
 Original Gravity : 1.042  
 Total Gravity : 1.043  
 Final Gravity : 1.012

### Fermentables (1.06 kg)

849 g - Finest Pale Ale Golden Promise 4.7 EB...  
 106 g - Cara Gold malt 27.5 EBC (10%)  
 106 g - Torrefied Wheat 5.9 EBC (10%)  
 20 g - Bottling - Sugar, Table (Sucrose) 2 EBC  
 ^ Albert Heijn (NL)

### Hops (49.1 g)

60 min - 4.1 g - Ernest - 5.6% (12 IBU)  
 15 min - 10 g - Ernest - 5.6% (14 IBU)  
 7 min - 10 g - Ernest - 5.6% (8 IBU)

### Dry Hops

5 days - 25 g - Ernest - 5.6%

### Miscellaneous

Mash - 0.64 g - Baking Soda (NaHCO3)  
 ^ Lot # 41190621/3  
 ^ Brouwstore (NL) 003.106.2  
 Mash - 1.17 g - Calcium Chloride (CaCl2) 33 %...  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.62 g - Canning Salt (NaCl)  
 ^ Albert Heijn (NL)  
 Mash - 1.17 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 2.31 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

0.3 pkg - NBS NBS Classic English Ale Yeast

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

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

Mash Water : 3.18 L  
 Sparge Water : 5.72 L  
 Boil Time : 60 min  
 Total Water : 8.9 L



10 EBC

Brewhouse Efficiency: 71.8%  
 Mash Efficiency: 73.3%

### Mash Profile

Mash Steps  
 72.1 °C - Strike Temp  
 66 °C - 60 min - Infusion  
 72 °C - 30 min - Infusion

### Fermentation Profile

Imported  
 18.5 °C - 0 days - Primary

### Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...  
 Ca 81 Mg 15 Na 50 Cl 75 SO 200

SO/Cl ratio: 2.7  
 Mash pH: 5.39  
 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

+300g oat husks in mash. Stir mash 15 minutes in. Hop spider.