

32 Never Give Up! - 8.7%

Belgian Golden Strong Ale

Brewer: The Thirsty Otter

Type: All Grain

IBU : 29 (Tinseth)
 BU/GU : 0.4
 Colour : 8 EBC
 Carbonation : 2.8 CO2-vol

Pre-Boil Gravity : 1.046
 Original Gravity : 1.070
 Total Gravity : 1.073
 Final Gravity : 1.007

Fermentables (1.65 kg)

1.5 kg - Pils 3.5 EBC (90.9%)
 ^ Lot # 20210710
 ^ Brouwmaatje (NL) 051.002.4
 150 g - 10 min - Boil - Sugar, Table (Sucrose...
 ^ Albert Heijn (NL)
 38 g - Bottling - Sugar, Table (Sucrose) 2 EBC
 ^ Albert Heijn (NL)

Hops (13.6 g)

60 min - 4.1 g - Cascade (T90) - 7.5% (14 IBU)
 ^ Brouwmaatje (NL) BM-BL.053.148.3/100
 30 min - 4 g - Cascade (T90) - 7.5% (11 IBU)
 ^ Brouwmaatje (NL) BM-BL.053.148.3/100
 15 min - 5.5 g - Saaz - 3.6% (5 IBU)
 ^ Lot # T9020044SAA
 ^ Brouwmaatje (NL) BM-HUM.420000 Humlegarden...

Miscellaneous

Mash - 0.06 g - Baking Soda (NaHCO3)
 ^ Lot # 41190621/3
 ^ Brouwstore (NL) 003.106.2
 Mash - 0.8 g - Calcium Chloride (CaCl2) 33 % 33%
 ^ Lot # 115038
 ^ Brouwstore (NL) 055.035.0
 Mash - 0.82 g - Canning Salt (NaCl)
 ^ Albert Heijn (NL)
 Mash - 0.7 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 0.72 g - Gypsum (CaSO4)
 ^ Brouwmaatje (NL)
 Mash - 1.1 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3
 Mash - 4.5 l - NL Spa Reine Flat Mineral Water
 ^ Lot # 20211005
 ^ AH (NL)
 Sparge - 4.82 l - NL Spa Reine Flat Mineral W...
 ^ Lot # 20211005
 ^ AH (NL)
 60 min - Boil - 0.14 g - Lipohop K
 ^ Lot # LPK110
 ^ The Malt Miller (UK) CH-03-013
 10 min - Boil - 1 g - Irish Moss
 ^ Lot # 4348
 ^ Brouwstore (NL)
 10 min - Boil - 1 items - Wort Chiller
 ^ Brouwstore (NL) 057.020.20
 Bottling - 12 items - 33 cl Steinie bottle (2...

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

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

Mash Water : 4.5 L
 Sparge Water : 4.82 L
 Boil Time : 60 min
 Total Water : 9.32 L



8 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

04 High fermentability (60 min)
 71 °C - Strike Temp
 65 °C - 60 min - Temperature

Fermentation Profile

01 Ale + DR + Conditioning
 19 °C - 10 days - Primary
 22 °C (2 day ramp) - 4 days - Diacetyl rest
 19 °C - 14 days - Carbonation
 19 °C - 28 days - Conditioning

Water Profile

NL Spa Reine Flat Mineral Water (www.ah.nl) (...
 Ca 33 Mg 9 Na 38 Cl 75 SO 75

SO/Cl ratio: 1
 Mash pH: 5.38
 Sparge pH: 6

Measurements

Mash pH: 5.3
 Boil Volume: 8
 Pre-Boil Gravity: 1.038
 Post-Boil Kettle Volume: 6.5
 Original Gravity: 1.060
 Fermenter Top-Up:
 Fermenter Volume: 5
 Final Gravity: 1.004
 Bottling Volume: 3.96

Batch #19 - 3 Jul 2022

Recipe Notes

Pitched 8.5 grams Lallemend Abbaye yeast.

Batch Notes

03-07-2022 10:15 Added 0.06 gram Baking soda.
 03-07-2022 10:16 Added 0.82 gram Canning salt.
 03-07-2022 10:17 Added 0.70 gram Epsom salt.
 03-07-2022 10:18 Added 0.72 gram Gypsum.
 03-07-2022 10:20 Added 0.80 gram Calciumchloride.
 03-07-2022 10:21 Added 1.1 mL Lactic acid.
 03-07-2022 10:30 Strike water pH = 3.62 @ 48.2 C.
 03-07-2022 10:38 Mash in @ 71 C.
 03-07-2022 10:43 @ 5m 5.11 @ 44.6 C.
 03-07-2022 10:48 @10 m 5.23 @ 46.1 C.
 03-07-2022 10:53 @15 m 5.27 @ 43.7 C.
 03-07-2022 10:58 @20 m 5.32 @ 43.2 C.
 03-07-2022 11:03 @25 m 5.31 @ 41.4 C.
 03-07-2022 11:08 @30 m 5.30 @ 45.2 C.
 03-07-2022 11:13 @35 m 5.32 @ 45.1 C.
 03-07-2022 11:18 @40 m 5.33 @ 45.3 C.
 03-07-2022 11:23 @45 m 5.37 @ 42.8 C.
 03-07-2022 11:28 @50 m 5.35 @ 41.9 C.
 03-07-2022 11:33 @55 m 5.36 @ 38.7 C.
 03-07-2022 11:38 @60 m 5.35 @ 41.3 C.
 03-07-2022 11:56 First runnings MG = 1.060 @ 44.3 C --> SG = 1.068 @ 20 C.
 03-07-2022 12:00 level = 65 mm in white pot.
 03-07-2022 12:05 First batch sparge water 1.5 L @ 70 C.
 03-07-2022 12:25 Second batch sparge water 1.5 L @ 70 C.
 03-07-2022 12:55 Third batch sparge water 1.5 L @ 70 C.
 03-07-2022 13:44 Collected 8 L wort pH = 5.56 MG = 1.034 @ 35.8 C --> SG = 1.038 @ 20 C.
 03-07-2022 14:00 Added 0.14 grams Lipohop K.
 03-07-2022 14:05 Start of boil.
 03-07-2022 14:06 Added 4.14 gram Cascade hops.
 03-07-2022 14:35 Added 3.96 gram Cascade hops.
 03-07-2022 14:50 Added 5.54 gram Saaz hops.
 03-07-2022 14:55 Added 150 gram Sugar.
 03-07-2022 14:55 Added 1 gram Irish moss.
 03-07-2022 14:56 Added wort chiller.
 03-07-2022 14:57 Added temperature probe.
 03-07-2022 15:07 Flame out.
 03-07-2022 15:09 Level is 15 cm including wort chiller (hot).
 03-07-2022 15:55 Level is 13 cm cold, no wort chiller.
 03-07-2022 21:30 Pitched 8.5 grams Lallemend Abbaye yeast.

Day 0 in fermentation

03-07-2022 21:30 20.4 C, SG = 1.060.
 03-07-2022 22:00 18.6 C,

Day 1 in fermentation

04-07-2022 00:00 18.0 C.
 04-07-2022 04:00 17.8 C.
 04-07-2022 08:00 17.8 C.
 04-07-2022 10:30 17.9 C, dp = 50 mm H2O, many bubbles.
 04-07-2022 12:00 18.0 C, dp = 50 mm H2O, many bubbles.
 04-07-2022 14:00 18.3 C, dp = 50 mm H2O, many bubbles.
 04-07-2022 16:00 18.6 C, dp = 50 mm H2O, many bubbles.
 04-07-2022 18:00 18.9 C, dp = 50 mm H2O, two bubbles.
 04-07-2022 21:00 17.9 C, dp = 45 mm H2O, no bubbles.

Day 2 in fermentation

05-07-2022 00:00 18.5 C.
 05-07-2022 04:00 17.8 C.
 05-07-2022 08:00 18.4 C, dp = 50 mm H2O, many bubbles.
 05-07-2022 12:00 17.9 C.
 05-07-2022 16:00 17.9 C.

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Batch Notes

05-07-2022 18:30 18.7 C, dp = 50 mm H2O, many bubbles.
05-07-2022 20:00 17.9 C.
05-07-2022 22:00 18.5 C, dp = 50 mm H2O, many bubbles.

Day 3 in fermentation

06-07-2022 00:00 17.9 C.
06-07-2022 04:00 18.7 C.
06-07-2022 08:00 17.9 C, dp = 50 mm H2O, many bubbles.
06-07-2022 12:00 18.8 C.
06-07-2022 16:00 18.4 C.
06-07-2022 18:30 18.7 C, dp = 50 mm H2O, many bubbles.
06-07-2022 20:00 17.8 C.
06-07-2022 21:30 17.8 C, dp = 50 mm H2O, many bubbles.

Day 4 in fermentation

07-07-2022 00:00 18.2 C.
07-07-2022 04:00 18.6 C.
07-07-2022 08:00 18.8 C, dp = 30 mm H2O, no bubbles.
07-07-2022 12:00 18.8 C.
07-07-2022 16:00 18.9 C.
07-07-2022 18:45 18.9 C, dp = 12 mm H2O, no bubbles.
07-07-2022 20:00 18.9 C.

Day 5 in fermentation

08-07-2022 00:00 18.9 C.
08-07-2022 04:00 18.9 C.
08-07-2022 08:00 18.5 C, dp = 7 mm H2O, no bubbles.
08-07-2022 12:00 18.3 C.
08-07-2022 13:30 18.3 C, dp = 5 mm H2O, no bubbles.
08-07-2022 16:00 18.3 C, dp = 5 mm H2O, no bubbles.
08-07-2022 20:00 18.8 C.
08-07-2022 22:30 17.8 C, dp = 5 mm H2O, no bubbles.

Day 6 in fermentation

09-07-2022 00:00 17.8 C.
09-07-2022 04:00 18.0 C.
09-07-2022 08:00 18.0 C.
09-07-2022 10:30 18.2 C, dp = 2 mm H2O, no bubbles.
09-07-2022 12:00 18.2 C.
09-07-2022 15:00 18.5 C, dp = 1 mm H2O, no bubbles.
09-07-2022 16:00 18.7 C.
09-07-2022 18:00 18.9 C, dp = 1 mm H2O, no bubbles.
09-07-2022 20:00 17.8 C, dp = 1 mm H2O, no bubbles.

Day 7 in fermentation

10-07-2022 00:00 17.8 C.
10-07-2022 04:00 17.9 C.
10-07-2022 08:00 17.9 C.
10-07-2022 10:30 17.9 C, dp = 1 mm H2O, no bubbles.
10-07-2022 12:00 17.9 C.
10-07-2022 14:45 18.0 C, dp = 1 mm H2O, no bubbles.
10-07-2022 16:00 18.1 C.
10-07-2022 20:00 18.6 C, dp = 1 mm H2O, no bubbles.

Day 8 in fermentation

11-07-2022 00:00 17.8 C.
11-07-2022 04:00 17.8 C.
11-07-2022 08:00 18.0 C, dp = 1 mm H2O, no bubbles.
11-07-2022 12:00 18.1 C.
11-07-2022 13:30 18.3 C, dp = 1 mm H2O, no bubbles.
11-07-2022 16:00 18.5 C.
11-07-2022 17:30 18.6 C, dp = 1 mm H2O, no bubbles.
11-07-2022 20:00 18.1 C.
11-07-2022 21:30 17.8 C, dp = 1 mm H2O, no bubbles.

Day 9 in fermentation

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Batch Notes

12-07-2022 00:00 18.0 C.
12-07-2022 04:00 18.4 C.
12-07-2022 08:00 18.4 C.
12-07-2022 12:00 18.6 C.
12-07-2022 16:00 17.9 C.
12-07-2022 19:30 18.7 C, dp = 0 mm H2O, no bubbles.
12-07-2022 20:00 18.7 C.

Day 10 in fermentation

13-07-2022 00:00 18.5 C.
13-07-2022 04:00 17.9 C.
13-07-2022 08:00 18.4 C.
13-07-2022 12:00 17.8 C.
13-07-2022 16:00 18.7 C.
13-07-2022 20:00 18.2 C.
13-07-2022 21:00 18.5 C, dp = 0 mm H2O, no bubbles.

Day 11 in fermentation

14-07-2022 00:00 19.3 C.
14-07-2022 04:00 19.4 C.
14-07-2022 08:00 19.5 C.
14-07-2022 12:00 19.5 C.
14-07-2022 16:00 19.8 C.
14-07-2022 19:00 19.1 C, dp = 0 mm H2O, no bubbles.
14-07-2022 20:00 19.1 C.
14-07-2022 21:30 20.1 C, dp = 0 mm H2O, no bubbles.

Day 12 in fermentation

15-07-2022 00:00 20.1 C.
15-07-2022 04:00 20.1 C.
15-07-2022 08:00 21.0 C.
15-07-2022 08:30 20.8 C, dp = 0 mm H2O, no bubbles.
15-07-2022 12:00 20.4 C.
15-07-2022 16:00 20.4 C, dp = 0 mm H2O, no bubbles.
15-07-2022 20:00 21.0 C.
15-07-2022 22:15 21.0 C, dp = 0 mm H2O, no bubbles.

Day 13 in fermentation

16-07-2022 00:00 21.0 C.
16-07-2022 04:00 20.9 C.
16-07-2022 08:00 20.5 C.
16-07-2022 12:00 20.3 C.
16-07-2022 16:00 20.3 C.
16-07-2022 20:00 20.3 C.

Day 14 in fermentation

17-07-2022 00:00 20.3 C.
17-07-2022 04:00 20.2 C.
17-07-2022 08:00 20.8 C.
17-07-2022 12:00 20.3 C.
17-07-2022 16:00 20.3 C.
17-07-2022 20:00 20.5 C.

Day 15 in fermentation

18-07-2022 00:00 20.9 C.
18-07-2022 04:00 20.9 C.
18-07-2022 08:00 20.9 C.
18-07-2022 12:00 20.9 C.
18-07-2022 16:00 20.9 C.
18-07-2022 20:00 21.7 C.

Day 16 in fermentation

19-07-2022 00:00 21.3 C.
19-07-2022 04:00 21.7 C.
19-07-2022 08:00 21.9 C.
19-07-2022 12:00 21.9 C.

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Batch Notes

19-07-2022 16:00 21.7 C.
19-07-2022 18:00 18.9 C.
19-07-2022 21:00 19.9 C.
19-07-2022 22:00 18.9 C.
19-07-2022 23:00 19.3 C.

Day 17 in fermentation

20-07-2022 00:00 19.7 C.
20-07-2022 04:00 19.6 C.
20-07-2022 08:00 19.5 C.
20-07-2022 12:00 19.3 C.
20-07-2022 16:00 19.2 C.
20-07-2022 20:00 19.2 C.

Day 18 in fermentation

21-07-2022 00:00 19.1 C.
21-07-2022 04:00 19.8 C.
21-07-2022 08:00 19.2 C.
21-07-2022 12:00 19.7 C.
21-07-2022 16:00 19.0 C.
21-07-2022 20:00 19.3 C.

Day 19 in fermentation

22-07-2022 00:00 19.4 C.
22-07-2022 04:00 19.4 C.
22-07-2022 08:00 19.4 C.
22-07-2022 12:00 19.4 C.
22-07-2022 16:00 19.4 C.
22-07-2022 20:00 19.4 C.

Day 20 in fermentation

23-07-2022 00:00 19.4 C.
23-07-2022 04:00 19.4 C.
23-07-2022 08:00 19.0 C.
23-07-2022 10:00 18.9 C.
23-07-2022 10:30 19.8 C, dp = 0 mm H2O, SG = 1.004, pH = 4.15.

Bottling day

23-07-2022 10:30 Filled 12 Steinie bottles (33 cl).

Day 0 in conditioning

23-07-2022 10:00 18.9 C.
23-07-2022 16:15 18.6 C.
23-07-2022 20:00 19.1 C.

Day 1 in conditioning

24-07-2022 00:00 19.6 C.
24-07-2022 04:00 19.8 C.
24-07-2022 08:00 19.8 C.
24-07-2022 12:00 19.8 C.
24-07-2022 16:00 19.9 C.
24-07-2022 20:00 19.9 C.

Day 2 in conditioning

25-07-2022 00:00 19.9 C.
25-07-2022 04:00 18.6 C.
25-07-2022 08:00 19.9 C.
25-07-2022 12:00 19.9 C.
25-07-2022 16:00 19.7 C.
25-07-2022 20:00 19.8 C.

Day 3 in conditioning

26-07-2022 00:00 19.7 C.
26-07-2022 04:00 19.9 C.
26-07-2022 08:00 19.9 C.
26-07-2022 12:30 19.9 C.

Batch #19 - 3 Jul 2022

Batch Notes

26-07-2022 16:00 19.9 C.
26-07-2022 20:00 19.9 C.

Day 4 in conditioning

27-07-2022 00:00 19.9 C.
27-07-2022 04:00 19.7 C.
27-07-2022 08:00 19.3 C.
27-07-2022 12:00 19.2 C.
27-07-2022 15:30 19.2 C.
27-07-2022 18:30 19.2 C.
27-07-2022 20:30 19.2 C.

Day 5 in conditioning

28-07-2022 01:15 19.2 C.
28-07-2022 04:00 19.0 C.
28-07-2022 08:00 18.5 C.
28-07-2022 11:00 18.4 C.
28-07-2022 13:45 18.4 C.
28-07-2022 16:00 18.4 C.
28-07-2022 20:00 18.8 C.

Day 6 in conditioning

29-07-2022 00:00 18.9 C.
29-07-2022 04:00 18.9 C.
29-07-2022 08:00 18.8 C.
29-07-2022 12:00 18.8 C.
29-07-2022 16:00 18.8 C.
29-07-2022 20:00 19.5 C.

Day 7 in conditioning

30-07-2022 00:00 19.8 C.
30-07-2022 04:00 19.8 C.
30-07-2022 08:00 19.8 C.
30-07-2022 12:00 19.7 C.
30-07-2022 16:00 19.9 C.
30-07-2022 20:00 19.7 C.

Extra Measured Values

Strike Water Temperature	71
Strike Water pH	3.62
Sparge Water Temperature	70
Sparge Water pH	6
Pitch Temperature	20.4

Batch Log

3 July 2022	Brew Date
3 July 2022	Fermentation Start
3 July 2022 10:29	Status: Brewing
3 July 2022 21:30	SV = 17.0 C.
3 July 2022 21:30	Status: Fermenting
3 July 2022 21:50	SV = 18.0 C.
13 July 2022 20:43	SV = 18.5 C.

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Batch Log	
13 July 2022 22:38	SV = 19.0 C.
14 July 2022 20:18	SV = 20.0 C.
15 July 2022 06:13	SV = 21.0 C.
19 July 2022 12:15	WiFi outage.
19 July 2022 16:23	SV = 19.0 C.
19 July 2022 18:45	WiFi outage.
21 July 2022 13:45	WiFi outage.
23 July 2022 10:30	WiFi outage.
23 July 2022 10:30	Filled 12 Steinie bottles (33 cl).
23 July 2022	Bottling Date