

9 EBC

### 03 SMaSH Godiva - 4.7%

Brewer: The Thirsty Otter

Type: All Grain

IBU : 36 (Tinseth)
Colour : 9 EBC
Carbonation : 2.3 CO2-vol

Pre-Boil Gravity : 1.034
Post-Boil Gravity : 1.045
Original Gravity : 1.047
Final Gravity : 1.011

Fermentables (1.13 kg)

1.1 kg - Maris Otter Pale Ale Malt 5.9 EBC (9... 30 g - Bottling - Sugar, Table (Sucrose) 2 EB...

Hops (13 g)

60 min - 5 g - Godiva - 7.52% (18 IBU) 30 min - 4 g - Godiva - 7.52% (11 IBU) 15 min - 4 g - Godiva - 7.52% (7 IBU)

Miscellaneous

Mash - 0.5 ml - Calcium Chloride (CaCl2) 33 %

Mash - 0.1 g - Epsom Salt (MgSO4) Mash - 1.2 ml - Lactic Acid 80%

Mash - 4 items - pH paper strips 5.2 - 6.8

60 min - Boil - 0.35 g - Lipohop K 10 min - Boil - 1.1 g - Irish Moss

10 min - Boil - 0.1 g - Lallemand Servomyces

10 min - Boil - 1 items - Wort Chiller

Bottling - 13 items - 33 cl Steinie bottle (s...

Yeast

0.5 pkg - Lallemand (LalBrew) Nottingham Yeast

01 Brouwpunt 5L (60min) (rev 3)

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

Mash Water : 3.3 L Sparge Water : 4 L

Boil Time : 60 min Top-Up Water : 1.64 L Total Water : 8.94 L

Brewhouse Efficiency: 71.8% Mash Efficiency: 73.3%

Mash Profile

BP One Step Mash (60 min) 68.7 °C - Strike Temp

63 °C - 60 min - Temperature

Fermentation Profile

Ale

20 °C - 10 days - Primary 20 °C - 45 days - Conditioning

Water Profile

NL Hoofddorp Rein Tap Water (2020-Q1 WQR) (En...

Ca 47 Mg 10 Na 67 Cl 11 SO 48

SO/Cl ratio: 4.4 Mash pH: 5.42

Measurements

Mash pH: 5.5

Boil Volume: 7.1

Pre-Boil Gravity: 1.028

Post-Boil Gravity: 1.041

Post-Boil Kettle Volume: 5.3

Original Gravity: 1.041

Fermenter Top-Up: 0.72

Fermenter Volume: 5.3

Final Gravity: 1.002

Bottling Volume: 4.13

#### Recipe Notes

Single Mash and Single Hop exBEERiment

Malt is ordered with standard crush @ The Malt Miller (https://www.themaltmiller.co.uk/).



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Batch Notes
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05-09-2020
Boiled 4.7 L of water the night before.
Brew day
06-09-2020 09:30 siphoned 4 L into mash kettle, heated 4 L mash water.
Added 0.14 g Epsom salt, 0.5 mL Calcium chloride 33% and 1.2 mL Lactic acid 80% .
pH of Mash water = 5.8 before boil .
Mash in @ 69 C.
Mash pH - 5.7 @ 10 min.
Mash pH = 5.5 @ 30 min.
Mash pH = 5.5 @ 50 min.
Pre-Boil volume = 7.1 L.
Pre-Boil Specific Gravity = 1.020 @ 44.0 C --> 1.028 @ 20 C.
Added 0.35 grams Lipohop K.
Post-Boil volume = 5.3 L.
Post-Boil Specific Gravity = 1.040 @ 23.3 C --> 1.041 @ 20 C.
Fermenter volume = 5.3 L.
Fermentation
Day 0 in fermentation
06-09-2020 13:25 pitched 5 grams of yeast.
06-09-2020 13:35 @ 20.7 C.
06-09-2020 14:46 @ 24.0 C.
06-09-2020 16:01 @ 22.2 C, dp = 10 mm H2O.
06-09-2020 17:16 @ 22.0 C, dp = 25 mm H2O, fermentation has started.
06-09-2020 19:06 @ 21.7 C, dp = 50 mm H2O, some bubbles.
06-09-2020 21:21 @ 21.2 C, dp = 50 mm H20, some bubbles. 06-09-2020 23:12 @ 21.5 C, dp = 50 mm H20, many bubbles.
Day 1 in fermentation
07-09-2020 04:37 @ 21.5 C, dp = 50 mm H2O, many bubbles.
07-09-2020 09:19 @ 21.8 C, dp = 50 mm H2O, many bubbles.
07-09-2020 12:44 @ 21.8 C, dp = 50 mm H2O, many bubbles.
07-09-2020 15:07 @ 21.4 C, dp = 50 mm H2O, many bubbles.
07-09-2020 18:19 @ 22.4 C, dp = 50 mm H2O, many bubbles. 07-09-2020 21:48 @ 22.0 C, dp = 50 mm H2O, many bubbles. 07-09-2020 22:47 @ 22.0 C, dp = 50 mm H2O, many bubbles.
Day 2 in fermentation
08-09-2020 06:34 @ 21.9 C, dp = 45 mm H2O, less bubbles.
08-09-2020 10:35 @ 21.9 C, dp = 40 mm H2O, less bubbles. 08-09-2020 13:42 @ 20.9 C, dp = 35 mm H2O, no bubbles. 08-09-2020 17:40 @ 20.8 C, dp = 35 mm H2O, no bubbles.
08-09-2020 23:23 @ 20.9 C, dp = 20 mm H2O, no bubbles.
Day 3 in fermentation
09-09-2020 08:27 @ 20.2 C, dp = 5 mm H2O, no bubbles.
09-09-2020 14:35 @ 20.9 C, dp = 10 mm H2O, no bubbles. 09-09-2020 19:49 @ 20.1 C, dp = 5 mm H2O, no bubbles.
09-09-2020 22:27 @ 20.2 C, dp = 3 mm H2O, no bubbles.
Day 4 in fermentation
10-09-2020 08:41 @ 20.4 C, dp = 3 mm H2O, no bubbles.
10-09-2020 11:41 @ 20.2 C, dp = 3 mm H2O, no bubbles. 10-09-2020 13:38 @ 20.2 C, dp = 3 mm H2O, no bubbles. 10-09-2020 17:12 @ 20.0 C, dp = 3 mm H2O, no bubbles.
10-09-2020 18:44 @ 20.4 C, dp = 3 mm H2O, no bubbles.
10-09-2020 23:10 @ 20.6 C, dp = 1 mm H2O, no bubbles.
Day 5 in fermentation
11-09-2020 01:07 @ 20.6 C, dp = 1 mm H2O, no bubbles. 11-09-2020 08:27 @ 20.2 C, dp = 1 mm H2O, no bubbles.
11-09-2020 17:04 @ 20.9 C, dp = 5 mm H2O, no bubbles.
11-09-2020 23:32 @ 20.9 C, dp = 2 mm H2O, no bubbles.
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#### **Batch Notes**

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Day 6 in fermentation
12-09-2020 07:39 @ 20.4 C, dp = 1 mm H2O, no bubbles.
12-09-2020 21:26 @ 20.4 C, dp = 1 mm H2O, no bubbles.
12-09-2020 23:53 @ 20.2 C, dp = 1 mm H2O, no bubbles.
Day 7 in fermenatation
13-09-2020 09:45 @ 20.9 C, dp = 1 mm H2O, no bubbles.
13-09-2020 12:40 @ 20.0 C, dp = 0.1 mm H2O, no bubbles.
13-09-2020 16:17 @ 20.9 C, dp = 0.1 mm H2O, no bubbles.
13-09-2020 21:02 @ 20.3 C, dp = 0.1 mm H2O, no bubbles.
Day 8 in fermentation
14-09-2020 00:14 @ 20.5 C, dp = 1 mm H2O, no bubbles.
14-09-2020 08:20 @ 20.3 C, dp = 0.1 mm H2O, no bubbles.
14-09-2020 11:57 @ 20.3 C, dp = 0.1 mm H2O, no bubbles.
14-09-2020 17:00 @ 20.9 C, dp = 2 mm H2O, no bubbles.
14-09-2020 22:02 @ 20.9 C, dp = 1 mm H2O, no bubbles.
Day 9 in fermentation
15-09-2020 00:34 @ 20.8 C. dp = 2 mm H2O, no bubbles.
15-09-2020 08:30 @ 20.5 C. dp = 0.1 mm H2O, no bubbles.
15-09-2020 13:24 @ 20.7 C. dp = 1 mm H2O, no bubbles.
15-09-2020 19:37 @ 20.9 C. dp = 1 mm H2O, no bubbles.
15-09-2020 23:11 @ 20.4 C. dp = 1 mm H2O, no bubbles.
Day 10 in fermentation
16-09-2020 08:28 @ 20.8 C. dp = 0.1 mm H2O, no bubbles.
16-09-2020 13:01 @ 20.9 C. dp = 0.1 mm H2O, no bubbles.
16-09-2020 19:24 @ 21.1 C. dp = 0.1 mm H2O, no bubbles.
16-09-2020 20:21 @ 22.5 C, dp = 0.1 mm H2O, no bubbles.
Bottling Day
16-09-2020 20:21 Final Gravity = 1.002 @ 22.5 C --> 1.002 @ 20 C.
16-09-2020 21:00 added 30 gram sugar @ 720 ml water.
16-09-2020 21:15 very pale yellow colour.
16-09-2020 21:17 bottled 12.5 Steinie (33 cl swing-top) bottles.
16-09-2020 21:32 @ 20.8 C.
Day 1 in conditioning
17-09-2020 00:33 @ 20.6 C.
17-09-2020 08:00 @ 20.2 C.
17-09-2020 11:45 @ 20.0 C.
17-09-2020 16:46 @ 20.9 C.
17-09-2020 22:23 @ 20.7 C.
17-09-2020 23:30 @ 20.7 C.
Day 2 in conditioning
18-09-2020 08:14 @ 20.7 C.
18-09-2020 12:17 @ 20.4 C.
18-09-2020 16:55 @ 20.4 C.
18-09-2020 23:44 @ 20.5 C.
Day 3 in conditioning
19-09-2020 08:33 @ 20.9 C.
19-09-2020 12:50 @ 20.7 C.
19-09-2020 17:13 @ 20.7 C.
19-09-2020 19:46 @ 20.8 C.
Day 4 in conditioning
20-09-2020 00:04 @ 20.8 C.
20-09-2020 09:00 @ 20.2 C.
20-09-2020 15:37 @ 20.2 C.
20-09-2020 21:30 @ 20.4 C.
Day 5 in conditioning
21-09-2020 07:49 @ 20.2 C.
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Batch Notes



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21-09-2020 10:31 @ 20.5 C.
21-09-2020 15:05 @ 20.1 C.
21-09-2020 22:18 @ 20.5 C.
Day 6 in conditioning
22-09-2020 07:38 @ 20.8 C.
22-09-2020 14:08 @ 20.9 C.
22-09-2020 17:44 @ 20.5 C.
22-09-2020 20:54 @ 20.0 C.
22-09-2020 23:23 @ 20.4 C.
Day 7 in conditioning
23-09-2020 08:03 @ 20.2 C.
23-09-2020 16:10 @ 20.3 C.
23-09-2020 23:21 @ 20.2 C.
Day 8 in conditioning
24-09-2020 08:04 @ 20.1 C.
24-09-2020 12:34 @ 20.4 C.
24-09-2020 15:57 @ 20.3 C.
24-09-2020 22:59 @ 20.2 C.
Day 9 in conditioning
25-09-2020 07:44 @ 20.6 C.
25-09-2020 13:33 @ 19.7 C.
25-09-2020 20:52 @ 19.9 C.
25-09-2020 23:32 @ 20.2 C.
Day 10 in conditioning
26-09-2020 07:57 @ 19.6 C.
26-09-2020 14:47 @ 20.0 C.
26-09-2020 20:12 @ 20.5 C.
26-09-2020 22:52 @ 20.6 C.
Day 11 in conditioning
27-09-2020 09:49 @ 20.7 C.
27-09-2020 14:14 @ 20.6 C.
27-09-2020 17:46 @ 20.9 C.
27-09-2020 22:43 @ 20.9 C.
Day 12 in conditioning
28-09-2020 09:01 @ 20.6 C.
28-09-2020 13:00 @ 20.5 C.
28-09-2020 17:40 @ 20.4 C.
28-09-2020 22:45 @ 20.3 C.
Day 13 in conditioning
29-09-2020 08:31 @ 19.9 C.
29-09-2020 13:23 @ 19.9 C.
29-09-2020 19:40 @ 20.1 C.
29-09-2020 19:45 put a half filled bottle in the fridge @ 7 C for tasting.
29-09-2020 22:44 @ 20.0 C.
Day 14 in conditioning
30-09-2020 07:50 @ 20.8 C.
30-09-2020 14:03 @ 20.3 C.
30-09-2020 19:55 @ 20.8 C.
30-09-2020 23:17 @ 20.7 C.
Day 15 in conditioning
01-10-2020 08:05 @ 20.5 C.
01-10-2020 10:50 @ 20.3 C.
01-10-2020 15:45 @ 20.3 C.
01-10-2020 20:41 @ 20.0 C.
01-10-2020 23:54 @ 20.6 C.
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### Batch Notes

Day 16 in conditioning 02-10-2020 08:47 @ 19.5 C. 02-10-2020 11:36 @ 19.8 C. 02-10-2020 15:14 @ 20.8 C. 02-10-2020 20:59 @ 20.0 C. 02-10-2020 22:58 @ 20.0 C. Day 17 in conditioning 03-10-2020 09:28 @ 19.6 C. 03-10-2020 14:14 @ 19.1 C. 03-10-2020 18:45 @ 19.2 C. 03-10-2020 21:34 @ 20.0 C. Day 18 in conditioning 04-10-2020 08:57 @ 19.5 C. 04-10-2020 13:46 @ 19.8 C. 04-10-2020 20:20 @ 19.2 C. 04-10-2020 23:24 @ 19.5 C. Day 19 in conditioning 05-10-2020 08:38 @ 19.5 C.

Batch Log	
6 September 2020	Brew Date
6 September 2020	Fermentation Start
6 September 2020 09:30	Status: Brewing
6 September 2020 13:25	Status: Fermenting
16 September 2020	Bottling Date
16 September 2020 21:17	13 Steinie bottles (33 cl) filled

#### Taste

2.5 / 5.0: 02-10-2020 18:10 cooled and served @ 7 C. Opening the swing-top gave a puff. Poured clear with a little yeast from conditioning. No foam, light carbonation. A light sour taste, boozy, some light esters and dry mouthfeel.