

### 03 SMaSH Godiva - 4.7%

#### British Golden Ale

Brewer: The Thirsty Otter

Type: All Grain

IBU : 36 (Tinseth)  
 Colour : 9 EBC  
 Carbonation : 2.6 CO2-vol

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

#### Fermentables (1.1 kg)

1.1 kg - Maris Otter Pale Ale Malt 5.9 EBC (1...  
 ^ Lot # 45-200704-173451-144871-1/1  
 ^ The Malt Miller (UK) MAL-00-036  
 30 g - Bottling - Sugar, Table (Sucrose) 2 EBC  
 ^ Albert Heijn (NL)

#### Hops (13 g)

60 min - 5 g - Godiva (Whole) - 7.52% (18 IBU)  
 ^ Worchester Hop Shop (UK)  
 30 min - 4 g - Godiva (Whole) - 7.52% (11 IBU)  
 ^ Worchester Hop Shop (UK)  
 15 min - 4 g - Godiva (Whole) - 7.52% (7 IBU)  
 ^ Worchester Hop Shop (UK)

#### Miscellaneous

Mash - 0.5 ml - Calcium Chloride (CaCl2) 33 %  
 ^ Lot # 115038  
 ^ Brouwstore (NL) 055.035.0  
 Mash - 0.1 g - Epsom Salt (MgSO4)  
 ^ Lot # /2119000091  
 ^ Brouwstore (NL) 055.027.7  
 Mash - 1.2 ml - Lactic Acid 80%  
 ^ Lot # 20200213  
 ^ Brouwstore (NL) 003.002.3  
 Mash - 4 items - pH paper strips 5.2 - 6.8  
 ^ Lot # 20200422/1  
 ^ Brouwstore (NL) 013.075.7  
 60 min - Boil - 0.35 g - Lipohop K  
 ^ Lot # LPK110  
 ^ The Malt Miller (UK) CH-03-013  
 10 min - Boil - 1.1 g - Irish Moss  
 ^ Lot # 4348  
 ^ Brouwstore (NL) 125.249.1  
 10 min - Boil - 0.1 g - Lallemand Servomyces  
 ^ Lot # 154001112904ABV  
 ^ Brouwstore (NL) 050.620.4  
 10 min - Boil - 1 items - Wort Chiller  
 ^ Brouwstore (NL) 057.020.20  
 Bottling - 13 items - 33 cl Steinie bottle (s...  
 ^ Brouwstore (NL) 017.500.0

#### Yeast

0.5 pkg - Lallemand (LalBrew) Nottingham Yeast  
 ^ Lot # 10812600497711V  
 ^ The Malt Miller (UK) YEA-02-023

#### 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%



9 EBC

#### 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

# Batch #3 - 6 Sep 2020

## Recipe Notes

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

## Batch Notes

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 H2O, some bubbles.

06-09-2020 23:12 @ 21.5 C, dp = 50 mm H2O, 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

# Batch #3 - 6 Sep 2020

## Batch Notes

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.

### 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 fermentation

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 filled 12.5 Steinie bottles (33 cl swing-top).  
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.

# Batch #3 - 6 Sep 2020

## Batch Notes

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.  
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 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.

## Batch #3 - 6 Sep 2020

### Batch Notes

01-10-2020 15:45 @ 20.3 C.  
01-10-2020 20:41 @ 20.0 C.  
01-10-2020 23:54 @ 20.6 C.

#### 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.  
05-10-2020 12:50 @ 19.5 C.  
05-10-2020 19:17 @ 19.1 C.  
05-10-2020 23:31 @ 19.0 C.

#### Day 20 in conditioning

06-10-2020 07:52 @ 19.6 C.  
06-10-2020 10:54 @ 19.3 C.  
06-10-2020 14:17 @ 19.4 C.  
06-10-2020 20:45 @ 19.9 C.

#### Day 21 in conditioning

07-10-2020 00:15 @ 19.8 C.  
07-10-2020 08:22 @ 19.2 C.  
07-10-2020 21:05 @ 19.8 C.

#### Day 22 in conditioning

08-10-2020 00:24 @ 19.6 C.  
08-10-2020 08:32 @ 19.8 C.  
08-10-2020 11:56 @ 19.4 C.  
08-10-2020 15:43 @ 19.3 C.  
08-10-2020 20:47 @ 19.1 C.  
08-10-2020 22:34 @ 19.2 C.

#### Day 23 in conditioning

09-10-2020 08:51 @ 19.0 C.  
09-10-2020 12:52 @ 19.2 C.  
09-10-2020 18:02 @ 19.6 C.  
09-10-2020 23:07 @ 19.0 C.

#### Day 24 in conditioning

10-10-2020 09:46 @ 19.4 C.  
10-10-2020 13:26 @ 19.3 C.  
10-10-2020 17:25 @ 19.2 C.  
10-10-2020 23:13 @ 19.8 C.

#### Day 25 in conditioning

11-10-2020 08:58 @ 18.8 C.  
11-10-2020 12:59 @ 19.7 C.  
11-10-2020 16:18 @ 19.2 C.  
11-10-2020 21:17 @ 19.0 C.

## Batch #3 - 6 Sep 2020

### Batch Notes

#### Day 26 in conditioning

12-10-2020 09:42 @ 19.8 C.  
12-10-2020 13:25 @ 19.7 C.  
12-10-2020 20:44 @ 19.5 C.

#### Day 27 in conditioning

13-10-2020 00:43 @ 19.5 C.  
13-10-2020 09:38 @ 18.9 C.  
13-10-2020 14:35 @ 19.5 C.  
13-10-2020 19:21 @ 19.1 C.  
13-10-2020 23:58 @ 19.9 C.

#### Day 28 in conditioning

14-10-2020 08:06 @ 19.6 C.  
14-10-2020 14:25 @ 19.5 C.  
14-10-2020 19:16 @ 19.7 C.  
14-10-2020 23:18 @ 19.5 C.

#### Day 29 in conditioning

15-10-2020 08:15 @ 19.0 C.  
15-10-2020 11:50 @ 19.5 C.  
15-10-2020 14:10 @ 19.0 C.  
15-10-2020 22:53 @ 19.0 C.

#### Day 30 in conditioning

16-10-2020 08:41 @ 18.3 C.  
16-10-2020 13:18 @ 18.8 C.  
16-10-2020 18:26 @ 18.0 C.  
16-10-2020 23:02 @ 18.5 C.

#### Day 31 in conditioning

17-10-2020 10:24 @ 18.4 C.  
17-10-2020 14:01 @ 18.9 C.  
17-10-2020 19:09 @ 19.1 C.

#### Day 32 in conditioning

18-10-2020 09:20 @ 18.5 C.  
18-10-2020 16:30 @ 18.9 C.  
18-10-2020 20:54 @ 18.7 C.  
18-10-2020 23:21 @ 18.9 C.

#### Day 33 in conditioning

19-10-2020 08:57 @ 18.9 C.  
19-10-2020 13:15 @ 18.5 C.  
19-10-2020 17:54 @ 18.9 C.  
19-10-2020 22:10 @ 18.7 C.

#### Day 34 in conditioning

20-10-2020 00:07 @ 18.5 C.  
20-10-2020 08:37 @ 18.4 C.  
20-10-2020 12:22 @ 18.5 C.  
20-10-2020 18:49 @ 18.6 C.  
20-10-2020 23:02 @ 18.4 C.

#### Day 35 in conditioning

21-10-2020 08:24 @ 18.8 C.  
21-10-2020 12:34 @ 18.2 C.  
21-10-2020 18:38 @ 18.5 C.  
21-10-2020 23:33 @ 18.7 C.

#### Day 36 in conditioning

22-10-2020 08:28 @ 18.4 C.  
22-10-2020 12:58 @ 18.5 C.  
22-10-2020 18:10 @ 18.8 C.  
22-10-2020 23:04 @ 18.5 C.

# Batch #3 - 6 Sep 2020

## Batch Notes

### Day 37 in conditioning

23-10-2020 09:01 @ 18.1 C.  
23-10-2020 13:56 @ 18.4 C.  
23-10-2020 18:31 @ 18.4 C.  
23-10-2020 22:58 @ 18.9 C.

### Day 38 in conditioning

24-10-2020 09:15 @ 18.2 C.  
24-10-2020 11:48 @ 18.5 C.  
24-10-2020 14:07 @ 18.4 C.  
24-10-2020 16:54 @ 18.7 C.

### Day 39 in conditioning

25-10-2020 07:05 @ 19.2 C.  
25-10-2020 12:07 @ 19.3 C.  
25-10-2020 15:10 @ 19.9 C.  
25-10-2020 19:12 @ 20.7 C.  
25-10-2020 21:30 @ 20.5 C.

### Day 40 in conditioning

26-10-2020 04:29 @ 19.6 C.  
26-10-2020 07:47 @ 19.2 C.  
26-10-2020 10:19 @ 19.6 C.  
26-10-2020 15:45 @ 20.4 C.  
26-10-2020 20:55 @ 21.1 C.  
26-10-2020 23:46 @ 19.9 C.

### Day 41 in conditioning

27-10-2020 07:26 @ 19.9 C.  
27-10-2020 12:20 @ 19.7 C.  
27-10-2020 15:41 @ 19.5 C.  
27-10-2020 20:30 @ 19.9 C.

### Day 42 in conditioning

28-10-2020 00:17 @ 19.8 C.  
28-10-2020 08:09 @ 19.7 C.  
28-10-2020 13:44 @ 19.4 C.  
28-10-2020 18:51 @ 19.6 C.  
28-10-2020 23:56 @ 19.9 C.

### Day 43 in conditioning

29-10-2020 08:23 @ 19.4 C.  
29-10-2020 12:44 @ 19.5 C.  
29-10-2020 20:06 @ 19.8 C.  
29-10-2020 23:43 @ 19.2 C.

### Day 44 in conditioning

30-10-2020 08:29 @ 19.0 C.  
30-10-2020 14:09 @ 19.3 C.  
30-10-2020 18:35 @ 19.7 C.  
30-10-2020 23:42 @ 19.7 C.

### Day 45 in conditioning

31-10-2020 08:32 @ 19.5 C.  
31-10-2020 14:22 @ 19.7 C.  
31-10-2020 19:25 @ 19.7 C.  
31-10-2020 23:44 @ 19.4 C.

## Batch Log

6 September 2020	Brew Date
6 September 2020	Fermentation Start
6 September 2020 09:30	Status: Brewing

## Batch #3 - 6 Sep 2020

### Batch Log

6 September 2020 13:25	Status: Fermenting
16 September 2020	Bottling Date
16 September 2020 21:17	Filled 13 Steinie bottles (33 cl).
31 October 2020 23:46	Status: Completed

### Taste

2.7 / 5.0