

07 SMaSH Simcoe - 6%

American Pale Ale

Brewer: The Thirsty Otter

Type: All Grain

IBU : 39 (Tinseth)
 BU/GU : 0.69
 Colour : 10 EBC
 Carbonation : 2.4 CO2-vol

Pre-Boil Gravity : 1.041
 Original Gravity : 1.054
 Total Gravity : 1.056
 Final Gravity : 1.010

Fermentables (1.33 kg)

1.325 kg - Maris Otter Pale Ale Malt 5.9 EBC...
 ^ Lot # 694-201130-111430-176081-1/1
 ^ The Malt Miller (UK) MAL-00-036
 30 g - Bottling - Sugar, Table (Sucrose) 2 EBC
 ^ Albert Heijn (NL)

Hops (30 g)

30 min - 5 g - Simcoe (T90) - 13.3% (25 IBU)
 ^ Lot # 694-201130-111430-176081-HOP-05-004-R...
 ^ The Malt Miller (UK) HOP-05-004
 5 min - 5 g - Simcoe (T90) - 13.3% (9 IBU)
 ^ Lot # 694-201130-111430-176081-HOP-05-004-R...
 ^ The Malt Miller (UK) HOP-05-004

Hop Stand

10 min hopstand @ 80 °C
 10 min - 10 g - Simcoe (T90) - 13.3% (5 IBU)

Dry Hops

7 days - 10 g - Simcoe (T90) - 13.3%

Miscellaneous

Mash - 1.1 ml - Lactic Acid 80% 80%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3
 Mash - 3.97 l - NL Spa Reine Flat Mineral Water
 ^ Lot # 20210319
 ^ AH (NL)
 Mash - 2 items - pH paper strips 5.2 - 6.8
 ^ Lot # 20200422/1
 ^ Brouwstore (NL) 013.075.7
 Sparge - 5.18 l - NL Spa Reine Flat Mineral W...
 ^ Lot # 20210319
 ^ AH (NL)
 60 min - Boil - 0.38 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 - 0.15 g - Servomyces
 ^ Lot # 154001112904ABV
 ^ Brouwstore (NL)
 10 min - Boil - 1 items - Wort Chiller
 ^ Brouwstore (NL) 057.020.20
 Bottling - 4 items - 33 cl Steinie bottle (26...
 ^ Brouwstore (NL) 017.476.3
 Bottling - 10 items - 33 cl Steinie bottle (s...
 ^ Brouwstore (NL) 017.500.0

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

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

Mash Water : 3.97 L
 Sparge Water : 5.18 L
 Boil Time : 60 min
 Total Water : 9.15 L



10 EBC

Brewhouse Efficiency: 71.8%
 Mash Efficiency: 73.3%

Mash Profile

01 One Step Mash (60 min)
 73.3 °C - Strike Temp
 67 °C - 60 min - Temperature

Fermentation Profile

01 Ale + DR + Conditioning
 20 °C - 10 days - Primary
 23 °C - 4 days - Diacetyl rest
 20 °C - 14 days - Carbonation
 15 °C - 28 days - Conditioning

Measurements

Mash pH: 5.5

Boil Volume: 8.25

Pre-Boil Gravity: 1.041

Post-Boil Kettle Volume: 6.5

Original Gravity: 1.051

Fermenter Top-Up:

Fermenter Volume: 5.6

Final Gravity: 1.002

Bottling Volume: 4.45

Batch #8 - 4 Apr 2021

Recipe Notes

Malt is ordered with standard crush @ The Malt Miller (<https://www.themaltmiller.co.uk/>).
No minerals added (Ca = 5, Mg = 2, Na = 3, Cl = 5, SO4 = 4, HCO3 = 17).

Batch Notes

04-04-2021 10:25 4 L Spa flat mineral water.
04-04-2021 10:26 1.1 mL Lactic acid.
04-04-2021 10:30 pH < 5.2 @ 20 C.
04-04-2021 10:38 Mash in @ 73.2 C.
Lump hunting.
04-04-2021 11:38 start batch sparging.
04-04-2021 12:45 Batch sparged with 5 L Spa flat mineral water in 3 batches.
04-04-2021 12:48 SG = 1.031 @ 48 C --> 1.041 @ 20 C.
04-04-2021 12:50 wort level = 16.5 cm --> 8.25 L pre boil volume.
04-04-2021 12:53 added 0.38 grams Lipohop K.
04-04-2021 13:07 started boil.
04-04-2021 13:37 added 5 grams Simcoe pellet hops in a hop sock.
04-04-2021 13:57 added 0.15 grams Servomyces yeast nutrient.
04-04-2021 13:57 added 1 gram Irish Moss.
04-04-2021 13:57 added wort chiller.
04-04-2021 14:02 added 5 grams Simcoe pellet hops in a hop sock.
04-04-2021 14:08 flame out
04-04-2021 14:42 start hop stand @ 79.8 C.
04-04-2021 14:42 added 10 grams Simcoe pellet hops in hop sock
04-04-2021 14:52 end hop stand @ 73.3 C.
04-04-2021 15:15 wort level = 13 cm --> 6.5 L post boil volume.
04-04-2021 15:18 SG = 1.050 @ 24.8 C --> 1.051 @ 20 C.
04-04-2021 15:20 ~5.3 L wort in the fermenter, 1.2 L wort in a PET bottle with screw cap (1.5 L litre volume).
04-04-2021 15:45 pitched 5 grams US-05 yeast @ 22.7 C from rest of package of previous brew.
04-04-2021 15:50 pitched harvested yeast from batch #7 in PET bottle.

Day 0 in fermentation

04-04-2021 15:45 22.7 C, dp = 0 mm H2O, 1.051.
04-04-2021 18:33 19.2 C, dp = 0 mm H2O, no bubbles.
04-04-2021 21:53 19.5 C, dp = 30 mm H2O, no bubbles.

Day 1 in fermentation

05-04-2021 08:59 19.5 C, dp = 50 mm H2O, few bubbles.
05-04-2021 11:23 19.8 C, dp = 50 mm H2O, many bubbles.
05-04-2021 13:15 19.5 C, dp = 50 mm H2O, many bubbles.
05-04-2021 17:13 19.3 C, dp = 50 mm H2O, many bubbles.
05-04-2021 23:40 19.7 C, dp = 50 mm H2O, many bubbles.

Day 2 in fermentation

06-04-2021 08:21 19.7 C, dp = 50 mm H2O, many bubbles.
06-04-2021 12:42 19.8 C, dp = 50 mm H2O, many bubbles.
06-04-2021 15:22 19.9 C, dp = 50 mm H2O, many bubbles.
06-04-2021 20:22 19.5 C, dp = 50 mm H2O, many bubbles.
06-04-2021 22:50 20.0 C, dp = 50 mm H2O, many bubbles.

Day 3 in fermentation

07-04-2021 09:29 19.9 C, dp = 50 mm H2O, many bubbles.
07-04-2021 11:32 19.5 C, dp = 50 mm H2O, many bubbles.
07-04-2021 16:37 19.5 C, dp = 50 mm H2O, many bubbles.
07-04-2021 22:58 20.0 C, dp = 50 mm H2O, many bubbles.

Day 4 in fermentation

08-04-2021 07:51 19.0 C, dp = 50 mm H2O, many bubbles.
08-04-2021 13:12 20.0 C, dp = 50 mm H2O, many bubbles.
08-04-2021 17:12 19.9 C, dp = 50 mm H2O, many bubbles.
08-04-2021 23:14 19.3 C, dp = 50 mm H2O, many bubbles.

Day 5 in fermentation

09-04-2021 07:00 19.7 C, dp = 50 mm H2O, many bubbles.

Batch #8 - 4 Apr 2021

Batch Notes

09-04-2021 14:19 19.9 C, dp = 50 mm H2O, few bubbles.
 09-04-2021 22:17 19.8 C, dp = 50 mm H2O, few bubbles.

Day 6 in fermentation

10-04-2021 09:39 19.6 C, dp = 50 mm H2O, few bubbles.
 10-04-2021 15:26 18.9 C, dp = 50 mm H2O, few bubbles.
 10-04-2021 15:26 PET bottle with experiment shaken not stirred..
 10-04-2021 22:16 19.4 C, dp = 50 mm H2O, many bubbles.

Day 7 in fermentation

11-04-2021 09:23 19.5 C, dp = 50 mm H2O, no bubbles.
 11-04-2021 13:42 19.0 C, dp = 48 mm H2O, no bubbles.
 11-04-2021 14:50 added 10 gram Simcoe pellet hops for dry hopping.
 11-04-2021 14:50 19.4 C, dp = 0 mm H2O, no bubbles.
 11-04-2021 17:29 18.9 C, dp = 45 mm H2O, no bubbles.
 11-04-2021 18:40 18.8 C, dp = 5 mm H2O, no bubbles.
 11-04-2021 21:50 19.2 C, dp = 2 mm H2O, no bubbles.

Day 8 in fermentation

12-04-2021 08:13 19.4 C, dp = 1 mm H2O, no bubbles.
 12-04-2021 13:39 19.0 C, dp = 20 mm H2O, no bubbles.
 12-04-2021 17:40 19.1 C, dp = 15 mm H2O, no bubbles.
 12-04-2021 22:27 19.0 C, dp = 20 mm H2O, no bubbles.

Day 9 in fermentation

13-04-2021 07:52 19.7 C, dp = 2 mm H2O, no bubbles.
 13-04-2021 12:10 19.8 C, dp = 45 mm H2O, no bubbles.
 13-04-2021 19:00 19.2 C, dp = 1 mm H2O, no bubbles.
 13-04-2021 23:04 19.1 C, dp = 1 mm H2O, no bubbles.

Day 10 in fermentation

14-04-2021 08:15 19.4 C, dp = 2 mm H2O, no bubbles.
 14-04-2021 08:22 SV = 23.0 C
 14-04-2021 12:10 21.7 C, dp = 4 mm H2O, no bubbles.
 14-04-2021 20:00 22.3 C, dp = 1 mm H2O, no bubbles.
 14-04-2021 23:21 23.0 C, dp = 20 mm H2O, no bubbles.

Day 11 in fermentation

15-04-2021 07:27 22.7 C, dp = 3 mm H2O, no bubbles.
 15-04-2021 15:40 22.1 C, dp = 3 mm H2O, no bubbles.
 15-04-2021 23:09 22.0 C, dp = 3 mm H2O, no bubbles.

Day 12 in fermentation

16-04-2021 07:30 22.0 C, dp = 1 mm H2O, no bubbles.
 16-04-2021 12:38 22.1 C, dp = 15 mm H2O, no bubbles.
 16-04-2021 18:07 22.8 C, dp = 3 mm H2O, no bubbles.

Day 13 in fermentation

17-04-2021 09:04 22.0 C, dp = 2 mm H2O, no bubbles.
 17-04-2021 12:02 23.0 C, dp = 1 mm H2O, no bubbles.
 17-04-2021 16:18 23.0 C, dp = 1 mm H2O, no bubbles.
 17-04-2021 21:49 22.3 C, dp = 0 mm H2O, no bubbles.

Day 14 in fermentation

18-04-2021 09:24 22.8 C, dp = 0 mm H2O, no bubbles.
 18-04-2021 14:23 22.4 C, dp = 40 mm H2O, no bubbles.
 18-04-2021 18:58 21.6 C, dp = 0 mm H2O, no bubbles.
 18-04-2021 20:58 19.6 C, dp = 0 mm H2O, SG = 1.002.

Bottling day

18-04-2021 14:45 heated 350 mL tap water with 30 grams table sugar to the boil.
 18-04-2021 17:18 bottled PET fermenter beer in 2 Flensburg flip tops, added 2 grams table sugar.
 18-04-2021 21:34 Filled 13.5 Steinie bottles (33 cl).

Day 1 in conditioning

19-04-2021 09:30 19.6 C.

Batch #8 - 4 Apr 2021

Batch Notes

19-04-2021 13:25 19.6 C.
19-04-2021 18:51 19.2 C.
19-04-2021 23:05 20.0 C.

Day 2 in conditioning

20-04-2021 07:52 19.6 C.
20-04-2021 12:43 20.0 C.
20-04-2021 18:47 19.0 C.
20-04-2021 20:21 20.1 C.

Day 3 in conditioning

21-04-2021 05:40 20.1 C.
21-04-2021 12:29 19.9 C.
21-04-2021 19:33 19.8 C.

Extra Measured Values

Strike Temperature	73.2
Strike Water pH	5.2
Sparge Water pH	6
Sparge Water Temperature	70

Batch Log

4 April 2021	Brew Date
4 April 2021	Fermentation Start
4 April 2021 10:38	Status: Brewing
4 April 2021 15:45	Pitched 5 grams US-05 yeast @ 22.7 C
11 April 2021 14:50	Added 10 grams Simcoe for dry hopping
14 April 2021 08:22	Diacetyl rest @ 23 C
18 April 2021	Bottling Date
18 April 2021 21:34	Filled 13.5 Steinie bottles (33 cl)
18 April 2021 21:35	Status: Conditioning