

BREWSHEET v3.3 (2012-03-18)

user input  
calculated

Brew Lambic Batch 1
Name: 2013 November 26
Brew Date: 2013 November 26
Rack Date: 2014 November 24
Keg/Bottle Date: 2014 November 24
Estimated/Actual ABV, OG, FG, IBU, SRM, IBU/Gravity Ratio

Grain Pounds Potential SG Share Color % Bill
Pale Malt (2-Row) US 20.63 1.036 0.032 2.0 65.00%
Unmalted Raw White Wheat 11.11 1.037 0.018 2.0 35.00%

Hop Type Ounces Boil Time Alpha % IBU % Bill
Tettnanger (US) P 10.00 240 0.5% 6.3 100.00%

Design Notes
Cantillon uses 5g/L of hops (-0.67 oz/gal or -3.68 oz/5.5 gal)

Batch Variables and Calculations
Batch Size (gal): 15.00
Grain Temperature (F): 60
Total Grain Weight (lbs): 31.74
Mash Mash Time (min): 60
Desired Mash Temperature (F): 113
Strike Temperature (F): 129
Mash Ratio (qts/lb): 1.87
Grain Absorption (gal): 3.97
Mash Volume (gal): 17.34
Mash-out Temperature (F): 170
Estimated First Runnings (gal): 10.69
First Runnings Gravity (Brix): 11.90
First Runnings Gravity (SG): 1.036
Desired Sparge Temperature (F): 172
Sparge Water (gal): 10.23
Sparge Water Temperature (F): 178
Estimated Second Runnings (gal): 10.70
Second Runnings Gravity (Brix): 9.50
Second Runnings Gravity (SG): 1.025
Estimated Preboil Volume (gal): 21.39
Estimated Preboil Gravity (Brix): 21.40
Preboil Volume (gal): 10.10
Preboil Gravity (SG): 1.039
Extraction Efficiency (%): 73%
Boil Boil Time (min): 240
Estimated Evaporation Loss (gal): 4.93
Hop Absorption (gal): 0.25
Volume Left in Kettle (gal): 0.00
Actual Evaporation Rate (gal/hr): 1.76
Actual Evaporation Loss (gal): 7.03
Original Gravity (Brix): 13.40
Batch Size Efficiency (%): 68%
Actual Efficiency (%): 59%
Fermentation Primary Fermentation (days): 7
Primary Fermentation Temperature (F): 72
Gravity After Primary Fermentation (SG): 1.000
Temperature of Reading (F): 69
Corrected SG: 1.000
Secondary Fermentation (days): 90
Secondary Fermentation Temperature (F): 72
Gravity After Secondary Fermentation (SG): 1.000
Temperature of Reading (F): 67
Corrected SG: 1.000
Target Fermentation for Diacetyl Rest (%): 100%
Target Gravity for Diacetyl Rest (SG): 1.000
Calories per Pint: 166
12 oz. Bottles Required: 132
Carbonation Bottling Temperature (F): 68
Volumes of CO2: 3.55
Priming Sugar (oz): 0.5
DME (oz): 0.5
Forced Carbonation (lbs): 0.5

System Variables
Brewhouse Efficiency (%): 65%
Volume in Hoses (gal): 0.22
Volume in Wort Chiller (gal): 0.19
Volume in HERMS Coil (gal): 0.25
Mash/Lauter Tun Deadspace (gal): 0.14
Strike to Sparge Volume Ratio (%): 50%
Trub Loss (gal): 0.16
FWH IBU Factor (%): 10%
Strike Temperature Factor (F): 10
Sparge Temperature Factor (F): 5
Estimated Evaporation Rate (gal/hr): 1.23
Leaf Hop Absorption Ratio (qts/oz): 0.20
Pellet Hop Absorption Ratio (qts/oz): 0.10
Cooling Losses (%): 4%
Hydrometer Correction (SG): -0.001

BJCP Style Guidelines
Style: Fruit Lambic
Code: 17F
OG: 1.040-1.060
FG: 1.000-1.010
IBU: 2.0-10.0
SRM: 3.0-7.0
ABV: 5.0-7.0%
CO2: 2.6-4.5

Yeast Strain
Yeast Strain: White Labs WLP655 (Belgian Sour Mix)
Type: Belgian Sour Mix
Attenuation (%): 96%
Actual Attenuation (%): 96%
Fermentation Temp (F): 65
Flocculation:

Required Amounts
Cell Count (billions): 1.050
Vials (White Labs/Wyeast): 1
Dry Yeast (g): 52.6

Yeast Starter/Slurry
Vials (White Labs/Wyeast): 1
Date Yeast Produced:
Yeast Viability (%):
Yeast Growth Rate:
Yeast Inoculation Rate (million/ml):
Starter Volume Required (ml):
DME Required (oz):
Yeast slurry concentration (billion/ml): 2.5
Non-yeast Percentage (%): 20%
Yeast Slurry Required (ml):

User Variables

Batch Scaling
Desired OG: 1.050 Total Weight (lbs): 31.74
Batch Size (gal): 15.00 Total Ball: 100.00%
Brewhouse Efficiency (%): 65%
Grain Pounds Potential Color % Bill
Northwestern Pale Ale malt 20.63 1.036 2.8 65.00%
Unmalted Raw Red Wheat 11.11 1.037 2.0 35.00%

Poundage
Goal (lbs):
Amount (lbs | oz | f\_oz):
Amount (lbs | oz | f\_oz):
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Hydrometer Correction
SG: 1.052
Temperature (F): 60
Corrected SG: 1.051

Gravity Calculator
Brix: 13.40
Specific Gravity: 1.052
Degrees Plato: 12.80

Brix Ethanol Correction
Original Brix:
Current Brix:
SG:

Brewing Notes
First rest about 7 mins longer than specified.
Collected 1.75 gal of turbid mash the first time.
Next infusion brought temps to 167F instead of 150F!
Added cold water to get it down to 157F.
Collected 4.1 gal of turbid mash the second time.
Next infusion brought temps to 169F.
Collected 5 gal to the boil kettle.
Added 6.26 gal turbid mash to the mash tun; temp at 171F.
Collected 6.9 gal to the boil kettle (11.9 total).
Sparged with 9.5 gal.
Collected sparge in separate kettle; split boil kettle contents (half to cleaned mash tun as secondary boil kettle).
Total collected volume is ~21.5 gal.
Preboil gravity is 10 for boil kettle and 10.2 for secondary boil kettle.
11/27: barrel fermenting away quite nicely (a lot of airlock activity).
7/4: sampled the barrel; souring nicely although perhaps a bit more bitter than projected.
Was more bitter when sampled about 4 months before though...
Needs more souring; check again near Thanksgiving (~1 year).
11/24: 1.002 SG; racked on top of raspberries and blackberries.
1/19: sampled.
Blackberry: aroma is tart and fruity and quite pleasant; flavor is beautiful; berry with sour notes.
Needs to sit for a good few months more.
Raspberry (center) is wonderful but a bit light in raspberry flavor; aroma is sharp and fruity.
Sourness is perfect.
Raspberry (left) is the best so far; nice and fruity, sour, with a stellar finish of oak and fruit.