

BREWSHEET v3.4 (2014-12-14)

user input  
calculated

Brew			
Name:	FIGment of Your Imagination		
Brew Date:	2017 July 9	Collected (gal):	10.20
Rack Date:		Racked (gal):	
Keg/Bottle Date:	2017 September 24	Kegged/Bottled (gal):	10.00
Estimated		Actual	
ABV (%):	6.4%	ABV (%):	8.0%
OG (SG):	1.063	OG (SG):	1.069
FG (SG):	1.014	FG (SG):	1.008
IBU:	22.0	IBU:	23.0
SRM:	13.0	SRM:	17.0
IBU/Gravity Ratio:	0.36	IBU/Gravity Ratio:	0.33

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	21.50	1.036	0.049	2.0	79.81%
Pilsner (2-Row) Germany	2.00	1.037	0.005	2.0	7.42%
Belgian aromatic malt	0.50	1.036	0.001	26.0	1.86%
Belgian Special "B"	0.94	1.030	0.002	220.0	3.48%
Belgian candi syrup d-45	2.00	1.032	0.006	45.0	7.42%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Hallertauer (GR)	P	2.00	110	4.4%	13.4	36.36%
Hallertauer (GR)	P	1.50	110	2.5%	5.7	27.27%
Hallertauer (GR)	P	2.00	15	2.5%	3.5	36.36%

Design Notes	
Mash at 146F for 60 min then at 156F for 30 min; mash-out at 168F for 10 min.	
Add candi syrup at 10 min left in boil.	
Chop and caramelize 5# figs with some wort from the first runnings.	
Add to the boil at 10 min left in boil.	
Ferment at 64 for 24 to 48 hours; then let the yeast rise the temp to 78F until fermentation is done; rack to secondary for a month after fermentation is done.	
Assuming ~5# of figs yields ~0.010 SG.	

Batch Variables and Calculations	
Batch Size (gal):	11.00
Grain Temperature (F):	85
Total Grain Weight (lbs):	26.94
Mash	
Mash Time (min):	90
Desired Mash Temperature (F):	146
Strike Water (gal):	11.05
Strike Temperature (F):	160
Mash Ratio (qt/lb):	1.64
Grain Absorption (gal):	3.37
Mash Volume (gal):	13.20
Mash-out Temperature (F):	168
Estimated First Runnings (gal):	7.54
First Runnings (gal):	7.78
First Runnings Gravity (Brix):	16.20
First Runnings Gravity (SG):	1.063
Sparge	
Desired Sparge Temperature (F):	168
Sparge Water (gal):	7.07
Sparge Water Temperature (F):	172
Estimated Second Runnings (gal):	7.54
Second Runnings (gal):	6.75
Second Runnings Gravity (Brix):	7.70
Second Runnings Gravity (SG):	1.030
Estimated Preboil Volume (gal):	15.08
Estimated Preboil Gravity (Brix):	12.25
Preboil Volume (gal):	14.53
Preboil Gravity (Brix):	12.00
Preboil Gravity (SG):	1.047
Extraction Efficiency (%):	71%
Boil	
Boil Time (min):	110
Estimated Evaporation Loss (gal):	2.90
Hop Absorption (gal):	0.14
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	1.74
Actual Evaporation Loss (gal):	3.19
Original Gravity (Brix):	17.84
Batch Size Efficiency (%):	79%
Actual Efficiency (%):	74%
Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	64-78
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Secondary Fermentation (days):	28
Secondary Fermentation Temperature (F):	65
Gravity After Secondary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Tertiary Fermentation (days):	3
Tertiary Fermentation Temperature (F):	32
Final Gravity (SG):	1.008
Temperature of Reading (F):	42
Corrected SG:	1.008
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	224
12 oz. Bottles Required:	102
Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	2.15
Priming Sugar (oz):	
DME (oz):	
Forced Carbonation (lbs):	

System Variables	
Brewhouse Efficiency (%):	70%
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):	7
Sparge Temperature Factor (F):	4
Estimated Evaporation Rate (gal/hr):	1.58
Mash-out Temperature (F):	0.40
Pellet Hop Absorption Ratio (qts/oz):	0.10
Cooling Losses (%):	4%
Hydrometer Correction (SG):	0.001

BJCP Style Guidelines	
Style:	Belgian Dubbel
Code:	18B
OG:	1.062-1.075
FG:	1.008-1.018
IBU:	15.0-25.0
SRM:	10.0-17.0
ABV:	6.0-7.5%
CO2:	1.9-2.4

Yeast Strain	
Yeast Strain:	White Labs WLP500 (Trappist Ale)
Type:	Trappist Ale
Attenuation (%):	75-80%
Actual Attenuation (%):	88%
Fermentation Temp (F):	65-72F
Flocculation:	medium-low

Required Amounts	
Cell Count (billions):	477
Vials (White Labs/Wyeast):	8.2
Dry Yeast (g):	23.9
Yeast Starter/Slurry	
Vials (White Labs/Wyeast):	4
Date Yeast Produced:	2017 May 6
Yeast Viability (%):	58%
Yeast Growth Rate:	2.06
Yeast Inoculation Rate (million/ml):	116.12
Starter Volume Required (ml):	1999
DME Required (oz):	6.50
Yeast slurry concentration (billion/ml):	2.5
Non-yeast Percentage (%):	20%
Yeast Slurry Required (ml):	382

User Variables	

Batch Scaling				
Desired OG:		Total Weight (lbs):		
Batch Size (gal):		Total Bill:		
Brewhouse Efficiency (%):				
Grain	Pounds	Potential	Color	% Bill

Poundage		
Goal (lbs):	21.50	
Amount (lbs   oz_f_oz):	2	11.63
Amount (lbs   oz_f_oz):	2	10.47
Amount (lbs   oz_f_oz):	2	11.84
Amount (lbs   oz_f_oz):	2	11.46
Amount (lbs   oz_f_oz):	2	13.26
Amount (lbs   oz_f_oz):	2	13.75
Amount (lbs   oz_f_oz):	2	13.01
Amount (lbs   oz_f_oz):	2	2.58
Needed (lbs   oz_f_oz):	0	0.00

Hydrometer Correction		
SG:	1.066	
Temperature (F):	79	
Corrected SG:	1.069	

Gravity Calculator		
Brix:	17.00	17.84
Specific Gravity:	1.066	1.069
Degrees Plato:	16.03	16.76

Brix Ethanol Correction		
Original Brix:		
Current Brix:		
SG:		

Brewing Notes	
7/8: made 3000mL starter (@1.075 OG, need ~3L starter). Plan is to pitch at high krausen.	Batch 1 is 1.0065 SG @42=8.2% ABV So real average is 8% ABV Batch 1 hops are: 2 oz Cascade 1 oz Centennial 1 oz Columbus 1 oz Amarillo
7/9: mash started at 152F; reduced to 146F in ~25min; mashed for 45min total then increased temp to 156F; mashed another 20min; then mashout and collected. Collected ~1gal of first runnings and added to the figs; boiled and reduced. After 90min, had ~1.5gal extra (after adding candi syrup and figs); increased boil to get to ~11 gal. Increased boil time to ~110min.	
7/30: blowoff tube came out (discovered after returning from vacation); fermenting freezer stunk! Sampled beer; tasted fine! Great aroma and flavor of figs!	
8/2: cold crashed. 9/24: kegged.	
Batch 1 is really weird; no real fig or Belgian aroma; same with flavor; much more bitterness than anticipated; 1.014 FG @43=7.2% ABV Batch 2 is perfect; exactly as anticipated in every way; clearly Belgian; clearly fig. 1.009 FG @41=7.9% ABV Could batch 1 be something else? Like the ESB perhaps? I may have kegged fig and thought it was the ESB last time (hard to believe though). Anyways, average ABV is 7.5%. 9/29: figured it out! ESBs are OK. The bitter version is actually Soul Stripper (without dry hops)!	