

# Dad's Amber Ale - #166

## Description [See Brew.XLS](#)

Hoppy West Coast American Brown Ale (Brown IPA). See [#162](#), [#156](#), [#152](#), [#149](#), [#129](#) JBA, & Tasty's Janet's Brown Ale (AHA, & pg. 143 of Brewing Classic Styles). Makes ~11 gal, 6.9% ABV, 92 IBU, & 232 calories in 12 oz.

## Brew (Brew day takes ~8hr, see page 1 for mashing details) See next try, #1xx DBA

- 1) **Yeast**, 4 packs of US-05, dated 11/2020, rehydrated
- 2) **C filtered** 22 gal. H<sub>2</sub>O day before. Also, add 1 Campden tablet per 20 gal. the night before (1.1 tabs). 12.5 gal.
- 3) **Grain Bill** (32.5 lb. total grain) based on 68% extraction efficiency, got 73%. in brew pot.  
14 lb. Cargill 2 Row Pale Malt (42%) 10 lb. Golden Promise (30%) 5.5 lb. Rye (17%)  
16 oz. Acidulated (3.0%) 1 lb. 60L Crystal (1/3 Sacchra-50, 3%) 1 lb. Pale Choc. (230L) (3%)  
0 lb. Cane Sugar (3%, 4 pt.) ~\$35.00
- 4) **Mash-In** – 1x infusion, 147-150°F, use 1.25 qt./lb., 10.2 gal. of 162°F strike H<sub>2</sub>O, heat to 169°F, for 32.5 lb. malt, hold 60 min. (this one was 174°F in the kettle, and 167°F strike, added 1.5 qt. RT & got 165°F strike and 150°F, from lots of stirring of mash, held 60 min., 148°F at end.
- 5) **Water Adjustment** – 0 min. into Mash, add 7 gm. Gypsum, CaSO<sub>4</sub>, 3 gm. CaCl<sub>2</sub>, 5 gm. Epsom Salts, MgSO<sub>4</sub>, 3 gm. Citric Acid, 7.1, 3.1, 5.1, 3 gm. added before 2<sup>nd</sup> batch sparge (some with mash out) with 2.5 gal. mash out, ran off 9.0.(9.2 est.) gal., so added 6.5 (6.3 est.) gal. to get 15.5 gal. (14 gal. in brew pot), 115 ppm Ca, 22 ppm Mg, 153 ppm SO<sub>4</sub>, 98 ppm Cl, 35 ppm Na. SO<sub>4</sub>/Cl=1.6. Took pH sample (forgot) min. in, got pH = 5.2, 5.35 2<sup>nd</sup> batch, 5.25 avg., and pH = 5.14 after boil. See [EZ\\_water\\_Calculator-DBA166.xls](#) says 5.17 mash.
- 5) **Mash-Out** Add 2.5 gal. 205°F H<sub>2</sub>O, got 154°F. **Vorlauf**, clarify, ~7 min., RIMS on, to 168°F.
- 6) **2<sup>nd</sup> Batch Sparge** – Add 6.3 (6.5 actual) gal., to collect **15.5 gal.**, got 15.5 gal.  
**I.G. target = 1.064.** Adjust for S.G. = 1.065, so get S.G. = 1.053 avg. runnings, plus table sugar (+0 pts) & yeast (-1pts), got 1.059 avg. so added 0qt. H<sub>2</sub>O. Post boil 1.067, without sugar, so I added 0 lb. table sugar, and 0 qt. H<sub>2</sub>O to get 1.067.
- 7) **Boil Adds** (75 min. total boil, ~9 min. hot break, due to throttled back full pot) No hop bags.  
2 oz **Magnum**, (12.5%) pellets 50 min. boil left  
2.1 oz **Centennial**, 2.8 oz. **Citra** (9.8%) 19 min. boil left  
1 gal. **sweet wort** (reset clock, -2 min.) 15 min. boil left  
1 **WhirlFloc** tablet, 5.5 gm **DAP YN & ½ Zn** tablet 12 min. boil left  
2 oz. **CTZ** (11.7%) pellets 0 min. boil left
- 7) **Whirlpool** for 5 min., then gravity feed **Counterflow**, **Cool** wort to 66°F, into 2 ea., 6.5 gal. carboys.
- 8) **Hop Back**, loaded with 2.8 oz. home grown **Chinook**(?) whole hops (8/2015).
- 9) **Oxygenate**, 1.5 min. 0.7 liter/min. pure O<sub>2</sub>, ea. carboy, add blow-offs. pH = 5.14
- 10) **Pitch yeast**, 2 packs rehydrated US-05, in each of 2 carboys, ~65°F.

## Fermentation

- 1) 20 days in **primary**, 7 days@ 65-67°F, with chamber venting and heater, then to 70°F, over 3days. then 2 days at 71°F, then ~60°F 5 days. Started with blow-off tube in Star San in Fermentation Chamber, then bubblers.
- 2) 5 days in, added 2 oz. Eureka pellets in both carboys.
- 3) **Kegged** 12/15/18, dry hopped 1st keg with 4 oz. Ted's Citra, left \_\_\_ days ~\_\_\_°F. Got 10.7 gal. pH = 4.53.
- 4) 2<sup>nd</sup> keg dry hopped \_\_\_/\_\_\_/18, 2 oz. \_\_\_ for \_\_\_ days @ \_\_\_°F, then to fridge

## Results 🍷

- 1) Brewed, 10/26/18, 73% extract efficiency. good hop bitterness & low “brown” flavor, needs ½ lb. dark choc.
- 2) 1.067 to 1.017 is 75% apparent attenuation, OK for this crystal malt heavy grain bill.
- 3) [#137](#) was served at 6/13 NHC Tasty said, “One of the best Brown Ale’s he’d had.” #149 took 1<sup>st</sup> place in Vero Beach, 2016, out of ~20 beers. #152 in B’more June 2016, Tasty said, “it doesn’t suck.” 2017 1<sup>st</sup> Rnd” 38, 1 judge said too much roast, another, needs more Brown or Choc. malts. [#156](#), Mom’s House no prize, good many votes.
- 4) [#162](#), low malt flavor, Swaen malts? Good hop flavor & IBU, weak hop aroma in L keg, due to 4 oz. whole hops in thin, fine bag.
- 5) Next time, add ½ lb. Dark Choi. back in.

**\*Rehydrate Dry Yeast** Per John Palmer pg 72. Warm **11.5 gm.** yeast pack to RT. Prepare **115 ml** of sterile H<sub>2</sub>O at **105°F**. Sprinkle yeast onto H<sub>2</sub>O surface, wait **15 min.** Stir into a cream, wait **15 min., should foam up.** Adjust temperature to within **15°F** of wort, pitch.