

## #42: Breakup Ale (California Common)

CHRIS SWINGLEY (9-APR-2005)

### Recipe (for 5 gallons final volume)

9¼ pounds	(90%)	Crisp Maris Otter Pale Malt
1 pound	(10%)	Crystal Malt, 60L
1 ounce		Willamette whole hops, 4.5% AA (first wort hop)
1¼ ounces		Northern Brewer whole hops, 7.5% AA (60 minutes)
1 ounce		Willamette whole hops, 4.5% AA (1 minute)
1 ounce		Cascade whole hops, 4.5% AA (dry hopped in keg)
¼ teaspoon		Irish Moss (5 minutes)

White Labs WLP810, San Francisco Lager, pitched at 64°F

Starter: 2 quart starter (vial → 2 quarts), continuously stirred, cooled, decanted, warmed

Aeration: Drill aerator for two minutes after pitching

### Water

- Fairbanks city water
- 37¼ quarts water treated with:
  - 1 Campden tablet. removes chlorine ion and chloramine, reduces oxidation
- 15¼ quarts mash water treated with:
  - 1¼ teaspoons Gypsum. Adds 88 ppm Calcium, 212 ppm Sulfate

### Mash

- 15¼ quarts water @ 162°F, grist ratio of 1½ quarts:pound @ 153°F (Held 55 minutes)

### Sparge

- 6½ quarts water @ 210°F, drain
- 15½ quarts water @ 168°F, drain

### Boil

- Boiled 8.0 gallons for 90 minutes to yield 5½ gallons wort

### Fermentation

- Primary: glass, 7 days, 62°F. Temperature range 58–63°F.
- Secondary: glass, 10 days, 60°F. 1.018 at transfer, tastes great.

### Packaging

- Kegged with 79 grams dextrose
- Conditioned for 4 weeks
- Ready to drink on 21-May-2005

### Properties

Starting Gravity: 1.053

Original Extract: 13.1°Plato

Alcohol: 4.7% by volume

Apparent Attenuation: 67.0%

Bitterness: 38 IBU

BU:SG: 0.7169811320754725

Final Gravity: 1.017

Apparent Extract: 4.3°Plato

Real Extract: 5.963514719000893°Plato

Alcohol: 3.7% by weight

Mash Efficiency: 77%

Color: 10°SRM

BV: 1.3062766450763637

### Tasting Notes

- 27-Aug-2005 (18 weeks) – Good beer, not great. Hop flavors are a bit harsh and not very crisp.