

## #49: Duesenberg Winter Ale (Winter Ale)

CHRIS SWINGLEY (29-OCT-2005)

Named for our first sled dog, Duesenberg. Duesenberg's littermates are all named after luxury cars, with Duesenberg being the coolest and most obscure. Duesenberg was a U.S. luxury automobile manufacturer from 1913 to 1937.

### Recipe (for 5 gallons final volume)

11 pounds	(90%)	Crisp Maris Otter Pale Malt
12 ounces	(6%)	Briess Special Roast
8 ounces	(4%)	Briess Munich Malt 10L
1 ounce		U.S. Hallertauer whole hops, 4.3% AA (first wort hop)
3/4 ounce		Chinook pellet hops, 12.2% AA (60 minutes)
1 ounce		Cascade whole hops, 4.5% AA (10 minutes)
2 ounces		White Spruce new growth, lightly crushed (10 minutes)
4 grams		Grains of Paradise, ground (10 minutes)

White Labs WLP017 Whitbread Ale Yeast, pitched at 70°F

Starter: 3 quart starter (vial → 3 quarts), continuously stirred, cooled, decanted, warmed

Aeration: Drill aerator for three minutes after pitching

### Water

- Fairbanks city water
- 38 1/4 quarts water treated with:
  - 1 Campden tablet. removes chlorine ion and chloramine, reduces oxidation
- 18 1/4 quarts mash water treated with:
  - 1 1/2 teaspoons Gypsum. Adds 88 ppm Calcium, 212 ppm Sulfate

### Mash

- 18 1/4 quarts water @ 166°F, grist ratio of 1 1/2 quarts:pound @ 154°F (Held 60 minutes). 151°F at the end of the mash.

### Sparge

- 5 1/2 quarts water @ 205°F, drain
- 14 1/2 quarts water @ 168°F, drain

### Boil

- Boiled 8.0 gallons for 90 minutes to yield 5 1/2 gallons wort

### Fermentation

- Primary: bucket, 7 days, 66°F. Temperature range 70–66°F.. 1.023 at transfer to secondary
- Secondary: keg, 7 days, 66°F

### Packaging

- Kegged at 8 psi, 50°F (1.8 volumes CO<sub>2</sub>)
- Conditioned for 6 weeks
- Ready to drink on 24-Dec-2005

### Properties

Starting Gravity: 1.059	Final Gravity: 1.024
Original Extract: 14.5°Plato	Apparent Extract: 6.1°Plato
	Real Extract: 7.7°Plato
Alcohol: 4.6% by volume	Alcohol: 3.6% by weight
Apparent Attenuation: 58.2%	Mash Efficiency: 71%
Bitterness: 35 IBU	Color: 10°SRM
BU:SG: 0.59	BV: 0.94

### Tasting Notes