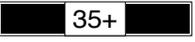


		Recipe vs. Style		
	Min	Recipe	Max	
O. G.	1.048	1.051	1.065	Wyeast 1098 British Ale yeast From Whitbread. Ferments dry and crisp, slightly tart, fruity and well-balanced. Ferments well down to 65oF. Flocculation medium; apparent attenuation 73-75%. (64-72o F) Attenuation: 74%
F. G.	1.012	1.013	1.016	
Alcohol % Vol	4.8	5.0	6	
I.B.U.	25	50	50+	
S.R.M.	 22	 49	 35+	
CO2 Range	1.7		2.3	

Fermentables for 11 gallons: (90 minutes)

- 9 lbs. of American Two-Row (Mash)
- 7 lbs. of American Crystal 120L (Mash)
- 3 lbs. of American Crystal 60L (Mash)
- 1.5 lbs. of American Chocolate (Mash)
- 1.5 lbs. of Special B (DeWolf-Cosyns) (Mash)

Hops Schedule:

- 1 oz. (28.3g) of Northern Brewer (6.5%) boiled for 90
- 1 oz. (28.3g) of Horizon (13%) boiled for 90 minutes.
- .75 oz. (21.3g) of Cascade (5.6%) boiled for 45 minutes.
- .5 oz. (14.2g) of Cascade (5.6%) boiled for 15 minutes.
- .3 oz. (8.5g) of Willamette (5%) boiled for 15 minutes.
- .75 oz. (21.3g) of Cascade (5.6%) boiled for 0 minutes.

Additions:

5 oz. (141.7 g) of Whirl-floc; boil 15 mins.

Comments:

Mash Schedule:

Add 6.6 gallons of water at 165 F to raise mash to 150 F. Sparge with 9.83 gals. water to yield 11 gals. after boil & chill. Total mash volume with grains is 8.32 gallons. 13.68 gallons in boiling pot prior to boil with 1.041 gravity. 16.43 gals. of water with a 90min. boil.

12. Porter — 12B. Robust Porter

Although a rather broad style open to brewer interpretation, it may be distinguished from Stout as lacking a strong roasted barley character. It differs from a brown porter in that a black patent or roasted grain character is usually present, and it can be stronger in alcohol. Roast intensity and malt flavors can also vary significantly. May or may not have a strong hop character, and may or may not have significant fermentation by-products; thus may seem to have an "American" or "English" character. Stronger, hoppier and/or roastier version of porter designed as either a historical throwback or an American interpretation of the style. Traditional versions will have a more subtle hop character (often English), while modern versions may be considerably more aggressive. Both types are equally valid.

Ingredients: May contain several malts, prominently dark roasted malts and grains, which often include black patent malt (chocolate malt and/or roasted barley may also be used in some versions). Hops are used for bittering, flavor and/or aroma, and are frequently UK or US varieties. Water with moderate to high carbonate hardness is typical. Ale yeast can either be clean US versions or characterful English varieties.

Aroma: Roasty aroma (often with a lightly burnt, black malt character) should be noticeable and may be moderately strong. Optionally may also show some additional malt character in support (grainy, bready, toffee-like, caramelly, chocolate, coffee, rich, and/or sweet). Hop aroma low to high (US or UK varieties). Some American versions may be dry-hopped. Fruity esters are moderate to none. Diacetyl low to none.

Appearance: Medium brown to very dark brown, often with ruby- or garnet-like highlights. Can approach black in color. Clarity may be difficult to discern in such a dark beer, but when not opaque will be clear (particularly when held up to the light). Full, tan-colored head with moderately good head retention.

Flavor: Moderately strong malt flavor usually features a lightly burnt, black malt character (and sometimes chocolate and/or coffee flavors) with a bit of roasty dryness in the finish. Overall flavor may finish from dry to medium-sweet, depending on grist composition, hop bittering level, and attenuation. May have a sharp character from dark roasted grains, although should not be overly acrid, burnt or harsh. Medium to high bitterness, which can be accentuated by the roasted malt. Hop flavor can vary from low to moderately high (US or UK varieties, typically), and balances the roasted malt flavors. Diacetyl low to none. Fruity esters moderate to none.

Mouthfeel: Medium to medium-full body. Moderately low to moderately high carbonation. Stronger versions may have a slight alcohol warmth. May have a slight astringency from roasted grains, although this character should not be strong.

Overall Impression: A substantial, malty dark ale with a complex and flavorful roasty character.

Commercial Examples: Anchor Porter, Great Lakes Edmund Fitzgerald Porter, Sierra Nevada Porter, Bell's Porter, Thirsty Dog Old Leghumper, Otter Creek Stovepipe Porter, Portland Haystack Black Porter, Avery New World Porter, Deschutes Black Butte Porter, Redhook Blackhook Porter