American Porter

- Gravity **13.8 BLG**
- ABV **---**
- IBU **59**
- SRM **30.4**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **23.5 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **25 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg *(76.5%)*	80 %	5
Grain	Briess - Caramel Munich Malt 60L	0.25 kg *(4.8%)*	77 %	118
Grain	Weyermann Specjal W	0.2 kg *(3.8%)*	68 %	300
Grain	Fawcett - Dark Crystal	0.3 kg *(5.7%)*	71 %	300
Grain	Biscuit Malt	0.2 kg *(3.8%)*	79 %	50
Grain	Caramunich typ III	0.2 kg *(3.8%)*	77 %	150
Grain	black malt extra	0.08 kg *(1.5%)*	55 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	13.2 %
Boil	Cascade	15 g	30 min	6 %
Boil	Citra	10 g	30 min	12 %
Boil	East Kent Goldings	10 g	30 min	5.1 %
Boil	Cascade	10 g	1 min	6 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Boil	Equinox	10 g	1 min	13.1 %
Boil	East Kent Goldings	15 g	1 min	5.1 %
Dry Hop	Cascade	10 g	5 day(s)	6 %
Dry Hop	Equinox	10 g	5 day(s)	13.1 %
Dry Hop	East Kent Goldings	10 g	5 day(s)	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale