

## W050 - Porter klonowy

- Gravity **13.9 BLG**
- ABV **6 %**
- IBU **31.6**
- SRM **40**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **0 %**
- Size with trub loss **17 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.27 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.41 liter(s)**
- Total mash volume **13.88 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **10.41 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **22.27 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BEST Pale Ale (BESTMALZ)	2.5 kg	82.8 %	15
Grain	Brown Malt	0.5 kg	70 %	340
Grain	Caramunich I (Weyermann)	0.25 kg	77.9 %	267
Grain	(de) CHÂTEAU CHOCOLAT NATURE	0.13 kg	75 %	2402
Grain	Caraaroma (Weyermann)	0.09 kg	73.58 %	934
Sugar	Maple Syrup	0.45 kg	65.2 %	183

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	15 g	60 min	9.2 %
Boil	Sybilla	25 g	15 min	6.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Scottish Ale	Ale	Liquid	124 ml	Wyeast Labs

### Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	3 g	Boil	10 min