

Ciemniak

- Gravity **10 BLG**
- ABV **4 %**
- IBU **27**
- SRM **41.9**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **7.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (62.5%)	80 %	5
Grain	Żytni	0.5 kg (20.8%)	85 %	8
Grain	Strzegom Czekoladowy 1200	0.4 kg (16.7%)	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	5 g	60 min	13 %
Boil	Centennial	5 g	60 min	10.5 %
Dry Hop	Chinook	10 g	3 day(s)	13 %
Dry Hop	Centennial	10 g	3 day(s)	10.5 %
Dry Hop	Citra	10 g	3 day(s)	12 %