

american porter v2

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **77**
- SRM **29.8**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (80%)	80 %	5
Grain	Strzegom Karmel 300	0.2 kg (4%)	70 %	299
Grain	Strzegom Karmel 600	0.2 kg (4%)	68 %	601
Grain	Jęczmień palony	0.15 kg (3%)	55 %	985
Grain	Weyermann - Carafa I	0.15 kg (3%)	70 %	690
Grain	Caraaroma	0.3 kg (6%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Chinook	20 g	20 min	13 %
Dry Hop	Simcoe	50 g	5 day(s)	13.2 %
Whirlpool	Chinook	30 g	20 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale