

Portier Palet

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **23.8**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (81.3%)	80 %	5
Grain	brown	0.5 kg (8.1%)	60 %	200
Grain	słód karmelowy 300	0.25 kg (4.1%)	--- %	---
Grain	Strzegom Karmel 600	0.1 kg (1.6%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.1 kg (1.6%)	68 %	1202
Grain	Fawcett - Pale Chocolate	0.1 kg (1.6%)	71 %	600
Grain	Carafa III	0.1 kg (1.6%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7 %
Boil	Fuggles	15 g	25 min	4.5 %
Boil	Fuggles	15 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	150 ml	Fermentum Mobile