

Choc porter

- Gravity **15.7 BLG**
- ABV ---
- IBU **25**
- SRM **37**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12.5 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (80%)	80 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (10%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.4 kg (8%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (2%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	40 g	60 min	4.5 %
Boil	Fuggles	20 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	1000 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Flavor	Kakao Odtłuszczone	150 g	Boil	5 min

Flavor	Bitter Orange Peel	20 g	Boil	10 min
Flavor	Sweet Orange Peel	10 g	Boil	10 min