

Czystki_magazynu

- Gravity **12.6 BLG**
- ABV ---
- IBU **72**
- SRM **33.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.1 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.2 kg (70.3%)	80 %	5
Grain	Caramel/Crystal Malt - 40L	0.4 kg (8.8%)	74 %	79
Grain	Briess - Chocolate Malt	0.2 kg (4.4%)	60 %	690
Grain	Carafa III	0.2 kg (4.4%)	70 %	1034
Sugar	biały	0.3 kg (6.6%)	--- %	---
Grain	Płatki owsiane	0.15 kg (3.3%)	85 %	3
Grain	Płatki orkiszowe	0.1 kg (2.2%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sticklebract	20 g	70 min	12 %
Boil	Sticklebract	25 g	20 min	12 %
Boil	Marynka	30 g	15 min	9.5 %
Boil	Sticklebract	25 g	2 min	12 %
Dry Hop	Sticklebract	30 g	4 day(s)	12 %
Dry Hop	Marynka	20 g	4 day(s)	9.5 %

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	4 g	Mash	---
Fining	Mech	4 g	Boil	10 min