

Whisky stout z resztek

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **35**
- SRM **34.5**
- Style **Foreign Extra Stout**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

Steps

- Temp **68 C**, Time **65 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **65 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Casle Malting Whisky Nature	5 kg (64.5%)	65 %	4
Grain	Monachijski	1 kg (12.9%)	65 %	16
Grain	Carafa II	0.1 kg (1.3%)	65 %	812
Grain	Fawcett - Pale Chocolate	0.5 kg (6.5%)	71 %	600
Grain	Viking melanoidynowy	0.5 kg (6.5%)	65 %	60
Grain	Carahell	0.4 kg (5.2%)	77 %	26
Grain	Jęczmień palony	0.25 kg (3.2%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Minstrel	50 g	60 min	4.9 %
Whirlpool	Ahtanum	50 g	0 min	5 %
Boil	Fuggles	25 g	60 min	4.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Boil	75 min