

stout festiwal

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **44.5**
- Style **Oatmeal 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 **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (44.4%)	80 %	5
Grain	Żytni	1.5 kg (33.3%)	85 %	8
Grain	Strzegom Czekoladowy ciemny	0.3 kg (6.7%)	68 %	1200
Grain	Jęczmień palony	0.4 kg (8.9%)	55 %	1400
Grain	Strzegom Karmel 300	0.3 kg (6.7%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	60 min	15.5 %
Boil	Hallertau	15 g	10 min	4.5 %

Yeasts

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