

Stout Trooper

- Gravity **14.7 BLG**
- ABV ---
- IBU **32**
- SRM **54.5**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **18 %/h**
- Boil size **15 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **15 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale (Malteurop)	1 kg (31.2%)	81 %	7
Grain	Słód Owsiany	1 kg (31.2%)	80 %	7
Grain	Płatki owsiane	0.4 kg (12.5%)	85 %	3
Grain	Abbey (Castle)	0.2 kg (6.2%)	80 %	45
Grain	Czekoladowy 900 (Castle)	0.2 kg (6.2%)	65 %	900
Grain	Brown (Fawcett)	0.2 kg (6.2%)	72 %	190
Grain	Kawowy	0.1 kg (3.1%)	72 %	500
Grain	Jęczmień palony (Castle)	0.1 kg (3.1%)	55 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	15 g	60 min	8.8 %
Aroma (end of boil)	Saaz	50 g	5 min	2.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Mięta Pieprzowa otarta	30 g	Secondary	3 day(s)