

American Stout

- Gravity **18.2 BLG**
- ABV ---
- IBU **56**
- SRM **49.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

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

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (69.2%)	80 %	4
Grain	Strzegom Monachijski typ II	0.6 kg (9.2%)	79 %	22
Grain	Jęczmień palony	0.2 kg (3.1%)	55 %	985
Grain	Oats, Flaked	0.3 kg (4.6%)	80 %	2
Grain	Rye, Flaked	0.3 kg (4.6%)	78.3 %	4
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.6%)	68 %	1200
Grain	Strzegom Karmel 600	0.3 kg (4.6%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	20 g	60 min	11 %
Boil	Citra	25 g	20 min	13.5 %
Boil	Citra	25 g	10 min	13.5 %
Whirlpool	Citra	25 g	0 min	13.5 %
Dry Hop	Citra	25 g	5 day(s)	13.5 %
Boil	Amarillo	12.5 g	10 min	8.9 %
Whirlpool	Amarillo	12.5 g	0 min	8.9 %

Dry Hop	Amarillo	25 g	5 day(s)	8.9 %
Boil	Mosaic	12.5 g	10 min	12 %
Whirlpool	Mosaic	12.5 g	0 min	12 %
Dry Hop	Mosaic	12.5 g	5 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	150 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Water Agent	Lactic Acid	4 g	Mash	---
Water Agent	Calcium Carbonate	4 g	Mash	---