

American Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **68**
- SRM **26.1**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.2 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (69%)	80 %	4
Grain	Strzegom Karmel 150	0.25 kg (3.4%)	75 %	150
Grain	Carafa II	0.5 kg (6.9%)	70 %	812
Grain	Biscuit Malt	0.5 kg (6.9%)	79 %	45
Sugar	Cukier trzcinowy	0.2 kg (2.8%)	--- %	---
Grain	Płatki owsiane	0.8 kg (11%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10 %
Boil	Cascade	20 g	45 min	6 %
Boil	Marynka	10 g	30 min	10 %
Boil	Willamette	50 g	15 min	5 %
Aroma (end of boil)	Cascade	30 g	0 min	6 %
Dry Hop	Cascade	50 g	7 day(s)	6 %

Yeasts

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