

American Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **67**
- SRM **31.2**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **12.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.5 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **9.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **12.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (80%)	80 %	5
Grain	Strzegom Karmel 300	0.2 kg (6.4%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.125 kg (4%)	68 %	1200
Grain	Carafa II	0.1 kg (3.2%)	70 %	812
Grain	Płatki jęczmienne	0.2 kg (6.4%)	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	30 g	70 min	9.5 %
Boil	Cascade	15 g	15 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale