

American Stout

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **51**
- SRM **33.6**
- 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 **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 **18.3 liter(s)**
- Total mash volume **23.5 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (76.5%)	80 %	4
Grain	Kawowy Ciemny Castle Malting	0.65 kg (12.4%)	75.5 %	500
Grain	Strzegom Karmel 150	0.3 kg (5.7%)	75 %	150
Grain	Chocolat Wheat - Castle Malting	0.2 kg (3.8%)	74 %	900
Grain	Black - Fawcett	0.08 kg (1.5%)	70 %	1450

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus (USA)	25 g	60 min	12.6 %
Boil	Zeus (USA)	15 g	20 min	15.5 %
Aroma (end of boil)	Zeus (USA)	15 g	5 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	1000 ml	Fermentis