American Stout

- Gravity **14.5 BLG**
- ABV **---**
- IBU **49**
- SRM **33**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg *(90.1%)*	81 %	4
Grain	Jęczmień palony	0.25 kg *(4.5%)*	55 %	985
Grain	Strzegom Karmel 150	0.2 kg *(3.6%)*	75 %	150
Grain	Strzegom Czekoladowy ciemny	0.1 kg *(1.8%)*	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	42 g	60 min	11.6 %
Whirlpool	Cascade	20 g	60 min	6 %
Whirlpool	Simcoe	20 g	60 min	13.2 %
Dry Hop	Cascade	30 g	4 day(s)	6 %
Dry Hop	Simcoe	30 g	4 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	300 ml	Fermentum Mobile

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	60 min
Water Agent	Chlorek Sodu	3 g	Mash	60 min