

American Stout

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **54**
- SRM **38.7**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **29.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (75.2%)	81 %	4
Grain	słód przenieiczny czekoladowy weyermann	0.55 kg (8.3%)	79 %	400
Grain	słód special b	0.1 kg (1.5%)	79 %	200
Grain	Weyermann - Carafa II	0.5 kg (7.5%)	70 %	837
Grain	Caraaroma	0.5 kg (7.5%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	8 g	60 min	5 %
Boil	Warrior	25 g	60 min	15.5 %
Aroma (end of boil)	Centennial	25 g	5 min	10.5 %
Aroma (end of boil)	Cascade	50 g	5 min	6 %
Dry Hop	Cascade	50 g	4 day(s)	6 %
Boil	Cascade	6 g	60 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM52 Amerykański Sen	Ale	Liquid	30 ml	Fermentis mobile
-------------------------	-----	--------	-------	------------------