

American Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **73**
- SRM **39.7**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **20.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (73%)	85 %	7
Grain	Caraaroma	0.25 kg (3.6%)	78 %	400
Grain	Strzegom Czekoladowy ciemny	0.35 kg (5.1%)	68 %	1200
Grain	Weyermann - Carafa III	0.25 kg (3.6%)	70 %	1400
Grain	Płatki owsiane	0.5 kg (7.3%)	85 %	3
Grain	Płatki jęczmienne	0.5 kg (7.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	30 g	60 min	12.9 %
Boil	Simcoe	40 g	15 min	12.9 %
Boil	Horizon	20 g	5 min	12.9 %
Boil	Simcoe	30 g	5 min	12.9 %
Aroma (end of boil)	Simcoe	30 g	1 min	12.9 %

Dry Hop	Citra	100 g	3 day(s)	12.9 %
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Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	200 ml	Fermentum Mobile