

Amerykańska polewka

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **45**
- SRM **36.5**
- 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 **24.9 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **25 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (58.8%)	89 %	6.5
Grain	Weyermann - Munich Malt I	2 kg (29.4%)	89 %	15
Grain	Weyermann - Carafa II	0.2 kg (2.9%)	80 %	1150
Grain	Carabohemian	0.2 kg (2.9%)	86 %	185
Grain	Strzegom pszenica prażona	0.2 kg (2.9%)	80 %	1000
Grain	Weyermann - czekoladowy	0.2 kg (2.9%)	80 %	1150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	30 g	50 min	14.1 %
Aroma (end of boil)	HBC 342	25 g	10 min	10.6 %
Dry Hop	HBC 342	25 g	3 day(s)	10.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	10 ml	Fermentum Mobile
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