

#72 Single Hop Centennial Ale

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **47**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (91.8%)	80 %	5
Grain	Płatki owsiane	0.4 kg (8.2%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Centennial	40 g	30 min	10.5 %
Boil	Centennial	30 g	60 min	10.5 %
Boil	Centennial	30 g	10 min	10.5 %
Aroma (end of boil)	Centennial	50 g	0 min	10.5 %
Dry Hop	Centennial	50 g	8 day(s)	10.5 %
Dry Hop	Centennial	100 g	5 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	35 ml	Fermentum Mobile