

Centennial SH

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **29**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (65.2%)	--- %	6
Grain	Pszeniczny	0.5 kg (21.7%)	85 %	4
Grain	Płatki owsiane	0.3 kg (13%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	20 g	15 min	9.7 %
Boil	Centennial	10 g	5 min	9.7 %
Boil	Centennial	5 g	0 min	9.7 %
Dry Hop	Centennial	15 g	5 day(s)	9.7 %
Boil	Magnum	5 g	5 min	13 %
Dry Hop	Cascade	15 g	5 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11.5 g	fermentis