

Jotnar

- Gravity **11 BLG**
- ABV ---
- IBU **40**
- SRM **13.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **4 %/h**
- Boil size **14.8 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **76C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **14.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (98%)	79 %	6
Grain	Strzegom pszenica prażona	0.05 kg (2%)	70 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	młode pędy sosny	75 g	Boil	30 min
Flavor	młode pędy sosny	25 g	Boil	0 min