

Golden sunrise nelson twojbrowar

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **32**
- SRM **5.6**
- Style **American Pale Ale**

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 **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsnerski	2.7 kg (64.3%)	80 %	14
Grain	Caramel Pils	0.3 kg (7.1%)	78 %	4
Grain	Rye, Flaked	1.2 kg (28.6%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Boil	Nelson Sauvín	20 g	10 min	11 %
Boil	Cascade	20 g	5 min	6 %
Boil	Sorachi Ace	20 g	5 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis