

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **23 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **10.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Malting - Pilzneński 6-rzędowy	3 kg (89.6%)	80 %	5
Grain	Caramunich® typ I	0.2 kg (6%)	73 %	80
Grain	Pszeniczny	0.15 kg (4.5%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	10.6 %
Boil	Amarillo	15 g	15 min	9.9 %
Aroma (end of boil)	Amarillo	20 g	1 min	9.9 %
Aroma (end of boil)	Azacca	10 g	1 min	10.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Notes

- Warzenie - 6.11.2022
17 litrów, 11 BLG

FERMENTACJA:

7.11.2022 - zadanie drożdży suchych uwodnionych US-05 - temp 16/17 C

8.11.2022 - fermentacja przed południem - temp 16/17 C

9.11.2022 - 16/17 temp

Nov 10, 2022, 1:04 AM