

# WWA e4 - 15.01.2022

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **48**
- SRM **3.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **65 min**
- Evaporation rate **15 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 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 **11.4 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 **17.9 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.25 kg (59.2%)	81 %	4
Grain	Thomas Fawcett Halcyon	1.4 kg (36.8%)	80.5 %	5
Grain	Pszeniczny	0.15 kg (3.9%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Azacca	18 g	60 min	12 %
Boil	Azacca	10 g	20 min	12 %
Aroma (end of boil)	Azacca	20 g	5 min	12 %
Aroma (end of boil)	Citra	20 g	5 min	12.2 %
Aroma (end of boil)	Amarillo	20 g	5 min	8 %
Dry Hop	Azacca	48 g	3 day(s)	12 %
Dry Hop	Amarillo	32 g	3 day(s)	8 %

## Yeasts

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

## Notes

- 19,5 litra brzezki nastawnej o BLG = 12,5  
Fermentacja US-05 - zadane ok godz 22, 16.01.  
Start fermentacji = 17.01. rano (sprawdzone o 14)  
Temp 17-19 stopni

30.01.2022 = 3 BLG

4.02.2022 = chmielenie na zimno

BUTELKOWANIE = 09.02.2022

3 BLG = 107g cukru w 850 ml wody.

*Jan 18, 2022, 8:31 PM*