

# Warsztaty KRAKÓW e11 - 7.11.2021

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **42**
- SRM **3.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.4 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **8.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.85 kg (100%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	6.5 %
Boil	Amarillo	20 g	15 min	8 %
Aroma (end of boil)	Amarillo	30 g	1 min	8 %
Aroma (end of boil)	Citra	18 g	1 min	12.2 %
Dry Hop	Amarillo	25 g	2 day(s)	8 %
Dry Hop	Citra	25 g	2 day(s)	12.2 %

## Yeasts

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

## Notes

- Brzeczka przednia = 10,2 BLG  
Gotowanie dodatkowo w domu ok 10 min  
chmienie na aromat na końcu gotowania w domu

Straty = 0,8 l  
Odparowanie =  
BLG = 12,5  
Do fermentacji = 11,5 litra

Fermentacja US-05 start 9.11.2021  
piwnica (temp ok 18 stopni)

Chmienie na zimno:  
6.01.2022  
minimalne oznaki pleśni na powierzchni piwa

Butelkowanie:  
8.01.2022  
63 g cukru  
*Nov 10, 2021, 2:25 PM*