

# Kraków e.13 - 27.02.2022

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **38**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 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 **10.2 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 **17.6 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.2 kg (94.1%)	85 %	7
Grain	Pszeniczny	0.2 kg (5.9%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	8 %
Boil	Amarillo	15 g	15 min	8 %
Aroma (end of boil)	Amarillo	23 g	5 min	8 %
Aroma (end of boil)	Sabro	17 g	5 min	13.6 %
Dry Hop	Amarillo	20 g	3 day(s)	8 %
Dry Hop	Sabro	20 g	3 day(s)	13.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis