

# Warka 16 - Pils + IPA -27.11.2023

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **17**
- SRM **4.2**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **70 liter(s)**
- Trub loss **5 %**
- Size with trub loss **73.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **88.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **71.8 liter(s)**
- Total mash volume **92.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **71.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **37.2 liter(s)** of **76C** water or to achieve **88.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	15 kg (73.2%)	81 %	4
Grain	Weyermann - Carapils	1.5 kg (7.3%)	78 %	4
Grain	Viking Pale Ale malt	3 kg (14.6%)	80 %	5
Grain	płatki jęczmienne	1 kg (4.9%)	60 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	30 g	60 min	8.9 %
Aroma (end of boil)	Saaz (Czech Republic)	90 g	10 min	4.5 %
Aroma (end of boil)	Palisade	60 g	10 min	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis
Safale US-05	Ale	Dry	300 g	Fermentis