

# Majówkowa IPKa

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **31**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **40 min**
- Temp **100 C**, Time **60 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **40 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.4 kg (63.8%)	82 %	4
Grain	Viking Wheat Malt	2.1 kg (30.4%)	83 %	5
Adjunct	Rice Hulls	0.4 kg (5.8%)	1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Amarillo	50 g	20 min	9.5 %
Whirlpool	Citra	50 g	20 min	12 %
Dry Hop	Amarillo	50 g	3 day(s)	9.5 %
Dry Hop	Citra	50 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	kwask mlekowy	4 g	Mash	60 min