

# ciotka MARY

- Gravity **14.3 BLG**
- ABV ---
- IBU **68**
- SRM **22.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Carafa I	0.3 kg (5.2%)	70 %	690
Grain	Pilznieński	4 kg (69%)	81 %	4
Grain	Monachijski	1 kg (17.2%)	80 %	16
Grain	Pszeniczny	0.5 kg (8.6%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	45 min	13.2 %
Boil	Marynka	15 g	45 min	10 %
Boil	Simcoe	25 g	15 min	13.2 %
Boil	Marynka	10 g	15 min	10 %
Boil	Cascade	25 g	1 min	6 %
Dry Hop	Cascade	25 g	5 day(s)	6 %

## Yeasts

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