

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 | Pilzneński | 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 |