

# Iwóweckie

- Gravity **14.5 BLG**
- ABV ---
- IBU **34**
- SRM **12.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 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 **22.8 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 **14.1 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale             | 4.5 kg (69.2%) | 80 %  | 8   |
| Grain | Pszeniczny                  | 0.7 kg (10.8%) | 85 %  | 4   |
| Grain | Weyermann - Melanoiden Malt | 1 kg (15.4%)   | 81 %  | 53  |
| Grain | Weyermann - Carared         | 0.3 kg (4.6%)  | 75 %  | 45  |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Amarillo | 20 g   | 60 min   | 9.5 %      |
| Boil      | Mosaic   | 30 g   | 20 min   | 10 %       |
| Whirlpool | Citra    | 50 g   | 0 min    | 12 %       |
| Whirlpool | Mosaic   | 20 g   | 0 min    | 10 %       |
| Dry Hop   | Cascade  | 50 g   | 4 day(s) | 6 %        |
| Dry Hop   | Mosaic   | 50 g   | 4 day(s) | 10 %       |
| Dry Hop   | Amarillo | 30 g   | 4 day(s) | 9.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale  | Dry  | 11 g   | ---        |