

## Warka nr 8

- Gravity **17.1 BLG**
- ABV ---
- IBU **62**
- SRM **6.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

### Steps

- Temp **72 C**, Time **75 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **22.2 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **75 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount        | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (67.6%)  | 85 %  | 7   |
| Grain | Pszeniczny                | 2 kg (27%)    | 85 %  | 4   |
| Grain | Płatki owsiane            | 0.4 kg (5.4%) | 85 %  | 3   |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Cascade    | 50 g   | 0 min  | 6 %        |
| Boil    | Mosaic     | 25 g   | 20 min | 10 %       |
| Boil    | Centennial | 25 g   | 20 min | 10.5 %     |
| Boil    | Mosaic     | 25 g   | 40 min | 10 %       |
| Boil    | Centennial | 25 g   | 40 min | 10.5 %     |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 15 g   | Fermentis  |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |                   |      |      |        |
|-------|-------------------|------|------|--------|
| Spice | skórka pomarańczy | 50 g | Boil | 30 min |
|-------|-------------------|------|------|--------|