

## Warka #23 7,5 blg

- Gravity **6.3 BLG**
- ABV **2.4 %**
- IBU **210**
- SRM **3**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.5 liter(s)**
- Total mash volume **7.3 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **5.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pilzneński           | 1.21 kg (66.1%) | 81 %  | 4   |
| Grain | Pszeniczny           | 0.22 kg (12%)   | 85 %  | 4   |
| Grain | Carahell             | 0.2 kg (10.9%)  | 77 %  | 26  |
| Grain | Viking Pale Ale malt | 0.1 kg (5.5%)   | 80 %  | 5   |
| Grain | Żytni                | 0.1 kg (5.5%)   | 85 %  | 8   |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Chinook    | 28 g   | 60 min | 13 %       |
| Boil                | Citra      | 40 g   | 10 min | 12 %       |
| Aroma (end of boil) | Mosaic     | 45 g   | 60 min | 10 %       |
| Aroma (end of boil) | Cascade PL | 30 g   | 60 min | 5.2 %      |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |

### Notes

- 4,5 litra wysłodzin z Made in Poland ipa (5blg)  
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