

## Przepis 2

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **5.9**

### 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 **1 %/h**
- Boil size **27.3 liter(s)**

### Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

### Fermentables

| Type  | Name               | Amount         | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński | 3.8 kg (80.9%) | 79 %  | 10  |
| Grain | Viking Munich Malt | 0.9 kg (19.1%) | 78 %  | 22  |

### Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Magnum  | 10 g   | 60 min | 13.5 %     |
| Aroma (end of boil) | Perle   | 30 g   | 15 min | 7 %        |
| Whirlpool           | Sybilla | 15 g   | 0 min  | 5.7 %      |
| Whirlpool           | Perle   | 15 g   | 0 min  | 7 %        |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| US-4 | Ale  | Dry  | 11.5 g | ---        |