

## Czerwien No.45

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **17**
- SRM **12.6**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **20 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **14.9 liter(s)** of strike water to **75.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Abbey Malt Weyermann | 3 kg (54.5%)   | 75 %  | 45  |
| Grain | Monachijski          | 1 kg (18.2%)   | 80 %  | 16  |
| Grain | Cara-Pils/Dextrine   | 1.5 kg (27.3%) | 72 %  | 4   |

### Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Styrian Golding | 15 g   | 60 min | 3.6 %      |
| Boil    | Challenger      | 15 g   | 60 min | 7 %        |

### Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 30 ml  | Fermentum Mobile |