

## 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