

# Zimna wojna - Red Ale

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **26**
- SRM **14.9**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (79.2%)	80 %	5
Grain	Strzegom Red Ale	0.5 kg (7.9%)	75 %	70
Grain	Carahell (R) 20-30 EBC Weyermann	0.2 kg (3.2%)	77 %	26
Grain	Caraaroma (R) 300-400 EBC Weyermann	0.15 kg (2.4%)	78 %	400
Grain	Karmelowy Czerwony 60	0.2 kg (3.2%)	75 %	59
Grain	Strzegom Karmel 150	0.2 kg (3.2%)	75 %	150
Grain	Jęczmień palony 1100-1200	0.06 kg (1%)	55 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	15 g	60 min	5 %
Boil	Marynka	10 g	60 min	10 %
Boil	Perle	35 g	20 min	5 %

Dry Hop	Citra	25 g	3 day(s)	12 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Liquid	1000 ml	starter

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	10 min