

# Czerwony Topór

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **21**
- SRM **15.1**
- Style **Irish Red Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (60.6%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (15.2%)	79 %	22
Grain	Caraamber	1 kg (15.2%)	75 %	59
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (7.6%)	73 %	120
Grain	Jęczmień palony	0.1 kg (1.5%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	40 min	10 %
Boil	Challenger	15 g	20 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Irish Ale	Ale	Liquid	35 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	6 g	Boil	15 min

### Notes

- Jęczmień palony od 0,05 do 0,15 kg - dla IBU od 11 - 17  
*Sep 30, 2018, 2:05 PM*