

# Czerwony Topór

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **19**
- SRM **15.6**
- 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 **20.9 liter(s)**
- Total mash volume **27.9 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 **20.9 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 **17.8 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale                  | 6 kg (86.1%)   | 80 %  | 8   |
| Grain | Weyermann - Caraamber            | 0.4 kg (5.7%)  | 75 %  | 65  |
| Grain | Weyermann - Carared              | 0.2 kg (2.9%)  | 75 %  | 45  |
| Grain | Słód Caramunich Typ II Weyermann | 0.1 kg (1.4%)  | 73 %  | 120 |
| Grain | Aroma CastleMalting              | 0.1 kg (1.4%)  | 78 %  | 100 |
| Grain | Jęczmień palony                  | 0.17 kg (2.4%) | 55 %  | 985 |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Marynka    | 15 g   | 60 min | 10 %       |
| Boil                | Challenger | 10 g   | 30 min | 7 %        |
| Aroma (end of boil) | Challenger | 10 g   | 10 min | 7 %        |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |     |        |           |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|

### Extras

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

### Notes

- Jęczmień palony od 0,01 kg do 0,23 kg - w zależności od pożądanej barwy (9 - 18 SRM)  
Fermentacja burzliwa w temperaturze około 17-18°C, około 7-9 dni fermentacja cicha w temp. kilka stopni niższej  
7g cukru lub glukozy na każdy litr piwa, w 200 - 250 ml wody, gotuj uzyskany syrop przez około 10 minut, ostudź. Syrop wlej do fermentora z kranikiem i przelej do niego piwo po cichej fermentacji, zadbaj o równomierne wymieszanie syropu z piwem. Piwo niezwłocznie butelkuj.

Zalecamy około 3 tygodni leżakowania w butelkach.

*May 17, 2020, 5:32 PM*