

Red ipa

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **98**
- SRM **11.2**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|------|
| Grain | Pilzneński | 5.5 kg (93.2%) | 81 % | 4 |
| Grain | Weyermann - Carared | 0.3 kg (5.1%) | 75 % | 45 |
| Grain | Jęczmień palony | 0.1 kg (1.7%) | 55 % | 1150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Boil | Simcoe | 50 g | 20 min | 13.2 % |
| Boil | Simcoe | 50 g | 10 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|-------|--------|-------------|
| Wyeast - American Ale | Ale | Slant | 100 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------------|--------|---------|--------|
| Other | Mech irlandzki | 5 g | Boil | 10 min |