

IRA czerwony karzeł

- Gravity **12.5 BLG**
- ABV ---
- IBU **22**
- SRM **14.2**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Pilzneński | 4 kg (76.3%) | 81 % | 4 |
| Grain | Strzegom Karmel 300 | 0.2 kg (3.8%) | 70 % | 299 |
| Grain | Bestmalz Red X | 1 kg (19.1%) | 79 % | 30 |
| Grain | Jęczmień palony | 0.04 kg (0.8%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | herkules | 12 g | 60 min | 17 % |
| Boil | herkules | 10 g | 5 min | 17 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 1100 ml | Fermentum Mobile |