

ira23/3

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **10.2**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (55.6%) | 80 % | 4 |
| Grain | Viking Pale Ale malt | 1 kg (18.5%) | 80 % | 6 |
| Grain | caramel pills Bestmalz | 0.3 kg (5.6%) | 80 % | 5 |
| Grain | red active- viking malt | 1 kg (18.5%) | 80 % | 35 |
| Grain | Czekoladowy bestmalz | 0.1 kg (1.9%) | 68 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 9.5 % |
| Boil | Lublin (Lubelski) | 20 g | 20 min | 4 % |
| Aroma (end of boil) | Citra uniwersalny | 30 g | 0 min | 13.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|-------|-------|--------|------------|
| Gozdawa - Czech Pilsner | Lager | Slant | 50 ml | Gozdawa |