

IRA

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **39**
- SRM **10.8**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.6 kg (65.2%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.9 kg (22.6%) | 79 % | 16 |
| Grain | Strzegom Karmel 300 | 0.2 kg (5%) | 70 % | 299 |
| Grain | Strzegom Karmel 30 | 0.25 kg (6.3%) | 75 % | 30 |
| Grain | Jęczmień palony | 0.035 kg (0.9%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Magnum | 20 g | 60 min | 13.5 % |
| Boil | Fuggles | 20 g | 20 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 11.5 g | Danstar |