

IRA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **27**
- SRM **9.4**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.32 kg (70.9%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.66 kg (20.2%) | 79 % | 16 |
| Grain | Strzegom Bursztynowy | 0.26 kg (8%) | 70 % | 49 |
| Grain | Jęczmień palony | 0.03 kg (0.9%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Challenger | 17 g | 60 min | 7 % |
| Boil | Styrian Golding | 17 g | 20 min | 3.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-04 | Ale | Dry | 10 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|---------|--------|
| Fining | mech | 6 g | Boil | 20 min |