

IRA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **26**
- SRM **9**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **35.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 1.5 kg (23.1%) | 85 % | 6 |
| Grain | Weyermann - Carared | 0.58 kg (8.9%) | 75 % | 45 |
| Grain | Monachijski typ II 20-25 EBC Weyermann | 0.25 kg (3.9%) | 80 % | 20 |
| Grain | Jęczmień palony | 0.06 kg (0.9%) | 55 % | 1150 |
| Grain | Weyermann - Pilsner Malt | 2.3 kg (35.4%) | 81 % | 4 |
| Grain | Weyermann - Vienna Malt | 1.8 kg (27.7%) | 81 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 15 g | 55 min | 7.6 % |
| Boil | Magnum | 8.5 g | 55 min | 12.7 % |
| Boil | Cascade | 40 g | 15 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-----|--------|-----|
| Safale S-04 | Ale | Dry | 11.5 g | --- |
|-------------|-----|-----|--------|-----|