

# IRA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **9.4**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **2 min**

## Mash step by step

- Heat up **14.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **2 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (70.7%) | 80 %  | 5   |
| Grain | Weyermann - Carared  | 0.4 kg (8.1%)  | 75 %  | 45  |
| Grain | Monachijski          | 1 kg (20.2%)   | 80 %  | 16  |
| Grain | Jęczmień palony      | 0.05 kg (1%)   | 55 %  | 985 |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 30 g   | 60 min | 7 %        |

## Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 200 ml | Fermentum Mobile |

## Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Fining      | Mech irlandzki | 4 g    | Boil    | 10 min |
| Water Agent | Gips           | 4 g    | Mash    | 60 min |

|             |                    |     |      |        |
|-------------|--------------------|-----|------|--------|
| Water Agent | Chlorek wapnia 33% | 3 g | Mash | 60 min |
|-------------|--------------------|-----|------|--------|

## Notes

- schłodzić do 17st i zadać drożdże. Utrzymywać w okolicach 18-19st przez całą burzliwą. po zakończeniu burzliwej, schłodzić poniżej 10st i trzymać jeszcze przez ok 2 tyg.

*Dec 27, 2022, 2:52 PM*