

- Gravity **12.4 BLG**
- ABV ---
- IBU **27**
- SRM **39.6**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.3 %/h**
- Boil size **27 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

### Fermentables

| Type  | Name  | Amount        | Yield  | EBC  |
|-------|---|---------------|--------|------|
| Grain | Malting company of Ireland - Irish Ale Malt | 4 kg (74.1%)  | 80.5 % | 7    |
| Grain | Black Barley (Roast Barley) crushed         | 0.5 kg (9.3%) | 50 %   | 1300 |
| Grain | Bestmalz - Cara Munich Type III             | 0.3 kg (5.6%) | 75 %   | 160  |
| Grain | Crisp - Wheat Malt (EBC 2.5-4.5)            | 0.4 kg (7.4%) | 85 %   | 4    |
| Grain | Weyermann - chocolate malt                  | 0.2 kg (3.7%) | 50 %   | 900  |

### Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Marynka   | 15 g   | 40 min | 8.6 %      |
| Boil    | Tradition | 30 g   | 40 min | 5.5 %      |

### Yeasts

| Name                      | Type | Form  | Amount  | Laboratory       |
|---------------------------|------|-------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Slant | 1000 ml | Fermentum Mobile |

## Extras

| Type   | Name      | Amount | Use for | Time  |
|--------|-----------|--------|---------|-------|
| Fining | Whirlfloc | 3 g    | Boil    | 5 min |