

Irish beer

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **9.8**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

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

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|------------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.65 kg (70.3%) | 80 % | 5 |
| Grain | Weyermann - Carared | 0.5 kg (7.6%) | 75 % | 45 |
| Grain | Strzegom Monachijski typ I | 1.25 kg (18.9%) | 79 % | 16 |
| Grain | Jęczmień palony | 0.0615 kg (0.9%) | 55 % | 985 |
| Grain | Karmelowy 50 - Viking Malt | 0.15 kg (2.3%) | 79 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Challenger | 32 g | 50 min | 7 % |
| Boil | Styrian Golding | 35 g | 20 min | 3.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 2000 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Flavor | laktoza | 500 g | Boil | 10 min |
| Spice | karmel | 300 g | Boil | 10 min |
| Spice | ksilitol | 500 g | Boil | 5 min |