

Irish red ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **23**
- SRM **11.3**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11.1 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **8.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.8 kg (64.7%)	80 %	5
Grain	Strzegom Monachijski typ I	0.4 kg (14.4%)	79 %	16
Grain	Weyermann - Carared	0.25 kg (9%)	75 %	45
Grain	Biscuit Malt	0.2 kg (7.2%)	79 %	45
Grain	Crystal Malt - castle malting	0.1 kg (3.6%)	72 %	150
Grain	Jęczmień palony	0.03 kg (1.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	9 g	60 min	12.5 %
Boil	Saaz (Czech Republic)	5 g	25 min	2.5 %

Yeasts

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

FM13 Irlandzkie Ciemności	Ale	Liquid	50 ml	Fermentum Mobile
------------------------------	-----	--------	-------	------------------