

IRA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **10.5**
- 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 **15 %/h**
- Boil size **24.4 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	4 kg (72.1%)	80 %	6
Grain	Strzegom Monachijski typ I	1 kg (18%)	79 %	16
Grain	Carared	0.5 kg (9%)	75 %	39
Grain	Jęczmień palony	0.05 kg (0.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Minstrel	25 g	60 min	4.9 %
Boil	Willamette	15 g	60 min	4.9 %