

IRA

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **22**
- SRM **10.6**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **15.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **11.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (67%)	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg (22.3%)	79 %	16
Grain	Abbey Castle	0.2 kg (8.9%)	80 %	45
Grain	Jęczmień palony	0.04 kg (1.8%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Dragon	15 g	40 min	7.3 %
Whirlpool	Styrian Dragon	15 g	1 min	7.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	80 ml	Fermentum Mobile