ira.T1

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **8.2**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **24.3 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.3 kg *(88.7%)*	80 %	7
Grain	Briess - 2 Row Carapils Malt	0.5 kg *(10.3%)*	75 %	3
Grain	Jęczmień palony	0.05 kg *(1%)*	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	50 min	15.5 %
Boil	Tradition	5 g	10 min	5.5 %
Boil	Tradition	5 g	5 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.