

## 15A. Irish red ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **24**
- SRM **13**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **12 %**
- Size with trub loss **20.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.778 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (66.7%)	80 %	7
Grain	Strzegom Monachijski typ I	1 kg (22.2%)	79 %	16
Grain	Karmelowy Czerwony	0.4 kg (8.9%)	75 %	59
Grain	Jęczmień palony	0.1 kg (2.2%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	15 g	60 min	7 %
Aroma (end of boil)	Challenger	35 g	10 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lutra	Ale	Slant	100 ml	omega

### Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCO3	2 g	Boil	60 min
Water Agent	CaCl2	2 g	Boil	60 min

## Notes

- jęczmień na sam koniec  
*Jul 13, 2023, 7:30 PM*