

## IRA byo

---

- Gravity **13.1 BLG**
- ABV ---
- IBU **32**
- SRM **19.2**
- Style **Irish Red Ale**

### Batch size

- Expected quantity of finished beer **18.3 liter(s)**
- Trub loss **10 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.9 liter(s)**

### Steps

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

### Mash step by step

- Heat up **14.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4.5 kg (90.3%)	80.5 %	6
Grain	Caramel/Crystal Malt - 40L	0.17 kg (3.4%)	74 %	79
Grain	Caramel/Crystal Malt - 120L	0.17 kg (3.4%)	72 %	236
Grain	Roasted Barley	0.142 kg (2.9%)	55 %	591

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	25 g	60 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis