

IRA ALE

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **27**
- SRM **17.4**
- Style **Irish Red Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3 liter(s)**
- Total mash volume **4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **60 min** at **100C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|----------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 1 kg (31.3%) | 80 % | 7 |
| Liquid Extract | Amber Malt | 1.2 kg (37.5%) | 75 % | 180 |
| Dry Extract | WES ekstrakt słodowy jasny | 1 kg (31.3%) | 80 % | 9 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 44 g | 30 min | 5.1 % |
| Aroma (end of boil) | Cascade | 17 g | 10 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | --- |