

# IRA

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **10.5**
- 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 **15 %/h**
- Boil size **24.4 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pale Malt (2 Row) Bel      | 4 kg (72.1%)   | 80 %  | 6   |
| Grain | Strzegom Monachijski typ I | 1 kg (18%)     | 79 %  | 16  |
| Grain | Carared                    | 0.5 kg (9%)    | 75 %  | 39  |
| Grain | Jęczmień palony            | 0.05 kg (0.9%) | 55 %  | 985 |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Minstrel   | 25 g   | 60 min | 4.9 %      |
| Boil    | Willamette | 15 g   | 60 min | 4.9 %      |