

# irish rye stout

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **41**
- SRM **33.9**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **26.7 liter(s)** of wort

## Fermentables

| Type  | Name   | Amount          | Yield | EBC  |
|-------|--|-----------------|-------|------|
| Grain | Maris Otter Crisp                            | 2 kg (35.7%)    | 83 %  | 6    |
| Grain | Żytni  | 2 kg (35.7%)    | 85 %  | 8    |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 0.5 kg (8.9%)   | 80 %  | 20   |
| Grain | Płatki jęczmienne                            | 0.5 kg (8.9%)   | 85 %  | 3    |
| Grain | Carafa III                                   | 0.2 kg (3.6%)   | 70 %  | 1300 |
| Grain | Jęczmień palony                              | 0.257 kg (4.6%) | 55 %  | 1000 |
| Grain | Strzegom<br>Czekoladowy ciemny               | 0.048 kg (0.9%) | 68 %  | 1200 |
| Grain | Jęczmień palony                              | 0.1 kg (1.8%)   | 55 %  | 1100 |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 27 g   | 60 min | 15.5 %     |

## Yeasts

| Name                         | Type | Form   | Amount  | Laboratory       |
|------------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie<br>Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type  | Name         | Amount | Use for | Time   |
|-------|--------------|--------|---------|--------|
| Other | łuska ryżowa | 250 g  | Mash    | 10 min |