

## Foreign Extra Stout 4.0

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **44**
- SRM **34.5**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **2.5 %**
- Size with trub loss **12.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **16.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **16.2 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale           | 3.5 kg (79.5%) | 79 %  | 6   |
| Grain | Barley, Flaked              | 0.3 kg (6.8%)  | 70 %  | 4   |
| Grain | Abbey Castle                | 0.07 kg (1.6%) | 80 %  | 45  |
| Grain | Special B Castle            | 0.18 kg (4.1%) | 70 %  | 350 |
| Grain | Weyermann - Chocolate Wheat | 0.09 kg (2%)   | 74 %  | 788 |
| Grain | Carafa II Special           | 0.09 kg (2%)   | 70 %  | 812 |
| Grain | Jęczmień palony             | 0.175 kg (4%)  | 55 %  | 985 |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Premiant | 25 g   | 60 min | 5.5 %      |
| Boil    | lunga    | 15 g   | 60 min | 10 %       |

### Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 200 ml | Fermentum Mobile |

### Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Fining      | Mech irlandzki | 3 g    | Boil    | 10 min |
| Water Agent | Pożywka        | 1 g    | Boil    | 10 min |