

## #9. Whisky extra stout

---

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **77**
- SRM **30.9**
- Style **Foreign Extra Stout**

### 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **68 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **21.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Słód wedzony torfem (Viking) | 2 kg (27.6%)   | 80 %  | 10  |
| Grain | Malteurop Ale                | 2.5 kg (34.5%) | 80 %  | 6   |
| Grain | Pszeniczny                   | 0.6 kg (8.3%)  | 85 %  | 4   |
| Grain | Jęczmień palony              | 0.4 kg (5.5%)  | 55 %  | 985 |
| Grain | Strzegom Monachijski typ I   | 1 kg (13.8%)   | 79 %  | 16  |
| Grain | Płatki owsiane               | 0.5 kg (6.9%)  | 85 %  | 3   |
| Grain | Strzegom Karmel 600          | 0.25 kg (3.4%) | 68 %  | 601 |

### Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | lunga   | 30 g   | 60 min | 12.9 %     |
| Boil                | lunga   | 20 g   | 45 min | 12.9 %     |
| Aroma (end of boil) | Oktawia | 15 g   | 30 min | 8.8 %      |
| Aroma (end of boil) | Oktawia | 15 g   | 15 min | 8.8 %      |
| Aroma (end of boil) | Oktawia | 20 g   | 10 min | 8.8 %      |

## Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 240 ml | Fermentum Mobile |

## Extras

| Type  | Name                                                   | Amount | Use for   | Time      |
|-------|--------------------------------------------------------|--------|-----------|-----------|
| Other | Płatki debowe średnio palone macerowane w Jack Daniels | 25 g   | Secondary | 14 day(s) |
| Other | Płatki High Mocha                                      | 20 g   | Secondary | 14 day(s) |