

## Bitter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **5.8**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt        | 3 kg (78.9%)   | 85 %  | 7   |
| Grain | Caramel/Crystal Malt - 10L       | 0.2 kg (5.3%)  | 75 %  | 20  |
| Grain | Słód Caramunich Typ II Weyermann | 0.1 kg (2.6%)  | 73 %  | 120 |
| Grain | Viking Wheat Malt                | 0.5 kg (13.2%) | 83 %  | 5   |

### Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | East Kent Goldings | 25 g   | 60 min | 5.1 %      |
| Boil    | East Kent Goldings | 15 g   | 30 min | 5.1 %      |
| Boil    | East Kent Goldings | 10 g   | 1 min  | 5.1 %      |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | mech irlandzki | 5 g | Boil | 10 min |
|--------|----------------|-----|------|--------|