

# Bitter Konkurs

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **10.5**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **10.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (87%)     | 82 %  | 4   |
| Grain | cookie              | 0.1 kg (2.9%)  | 75 %  | 50  |
| Grain | Strzegom Karmel 300 | 0.25 kg (7.2%) | 70 %  | 299 |
| Grain | Melanoiden Malt     | 0.1 kg (2.9%)  | 80 %  | 39  |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | Fuggles            | 10 g   | 60 min | 5.9 %      |
| Boil    | East Kent Goldings | 10 g   | 60 min | 4 %        |
| Boil    | East Kent Goldings | 10 g   | 30 min | 4 %        |
| Boil    | Fuggles            | 10 g   | 30 min | 5.9 %      |
| Boil    | East Kent Goldings | 10 g   | 15 min | 4 %        |
| Boil    | Fuggles            | 10 g   | 15 min | 5.9 %      |
| Boil    | Fuggles            | 20 g   | 0 min  | 5.9 %      |
| Boil    | East Kent Goldings | 20 g   | 0 min  | 4 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Safale     |