

# Bitter

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- Gravity **9.3 BLG**
- ABV ---
- IBU **32**
- SRM **10**
- Style **Standard/Ordinary Bitter**

## 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **65 C**, Time **70 min**

## Mash step by step

- Heat up **11.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale            | 3 kg (80%)     | 79 %  | 6   |
| Grain | Strzegom Monachijski typ II  | 0.5 kg (13.3%) | 79 %  | 22  |
| Grain | Bestmaltz Caramel Munich III | 0.25 kg (6.7%) | 50 %  | 150 |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Marynka   | 17 g   | 60 min | 8.8 %      |
| Boil    | Northdown | 22 g   | 15 min | 7.8 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 11 g   | Danstar    |