

Bitter

- 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 |