

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