

## Bitter (B)

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **31**
- SRM **11.1**
- 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 **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (83.3%)	80 %	5
Grain	Caramel/Crystal Malt - 80L	0.3 kg (6.3%)	74 %	158
Grain	Weyermann - Carared	0.2 kg (4.2%)	75 %	50
Grain	Biscuit Malt	0.15 kg (3.1%)	79 %	50
Grain	Karmelowy Viking	0.1 kg (2.1%)	75 %	300
Grain	Special W	0.05 kg (1%)	75 %	300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	60 min	5.1 %
Boil	East Kent Goldings	25 g	30 min	5.1 %
Boil	East Kent Goldings	10 g	5 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Slant	500 ml	White Labs

## Notes

- Warzenie - 15/03/2022 - 19l, 10.5 BLG  
Na cichą - 27/03/2023  
Butelkowanie - 31/03/2023 - 18l, 65g cukru

24/06/2023 - II miejsce w MPPD 2023  
*Mar 16, 2023, 7:27 AM*