

## premium bitter

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **35**
- SRM **7.5**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **16.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2.75 kg (48.7%)	79 %	16
Grain	Strzegom Pilzneński	1.1 kg (19.5%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (17.7%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.3%)	75 %	30
Grain	Jęczmień niesłodowany	0.5 kg (8.8%)	75 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Wolf	30 g	60 min	11.1 %
Aroma (end of boil)	Styrian Wolf	30 g	0 min	11.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US 04	Ale	Dry	11 g	---