

## Bitter z pazurem

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **4.7**
- Style **Special/Best/Premium 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 **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.1 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (87%)	81 %	4
Grain	Caramel/Crystal Malt - 10L	0.2 kg (4.3%)	75 %	20
Grain	Brown Malt (British Chocolate)	0.1 kg (2.2%)	70 %	128
Grain	Carabody	0.3 kg (6.5%)	70 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	40 g	60 min	5.1 %
Boil	Fuggles	30 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirfloc	2 g	Boil	5 min