

## Bitter zwyczajny

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- Gravity **9.6 BLG**
- ABV ---
- IBU **26**
- SRM ---
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **15.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **11.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (87.5%)	88 %	---
Grain	Strzegom Karmel 150	0.3 kg (7.5%)	8 %	---
Sugar	Strzegom karmelowy czerwony	0.15 kg (3.8%)	4 %	---
Grain	jęczmień palony	0.05 kg (1.3%)	1 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	25 g	60 min	5 %
Boil	Fuggles	20 g	45 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	---

### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Mash	70 min

Fining	mech irlandzki	4 g	Boil	15 min
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