

# Bitter Bocheński

- Gravity **13.3 BLG**
- ABV ---
- IBU **44**
- SRM **12.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **21.5 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **15.4 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (81.3%)	80 %	5
Grain	Pszeniczny	0.5 kg (8.1%)	85 %	4
Grain	Carared	0.5 kg (8.1%)	75 %	39
Grain	Jęczmień palony	0.05 kg (0.8%)	55 %	985
Grain	Strzegom Karmel 150	0.1 kg (1.6%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	35 g	60 min	11.2 %
Boil	Fuggles	25 g	15 min	4.5 %
Boil	Marynka	5 g	15 min	9.4 %
Aroma (end of boil)	Fuggles	25 g	0 min	4.5 %
Aroma (end of boil)	Marynka	5 g	0 min	9.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale