

# Best Bitter Angielski - 15-03-2020

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **27**
- SRM **7.3**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (90.7%)	80 %	7
Grain	Special B Malt	0.13 kg (2.4%)	65.2 %	315
Grain	Carahell	0.38 kg (6.9%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pilgrim	15 g	60 min	9 %
Boil	Willamette	25 g	30 min	5 %
Boil	Willamette	25 g	15 min	5 %
Aroma (end of boil)	Willamette	50 g	0 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
S-04	Ale	Dry	20 g	Fermentum Mobile