

# Special Bitter by vettis

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **37**
- SRM **8.1**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.9 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (87.3%)	80 %	5
Grain	Strzegom Pszeniczny	0.2 kg (3.5%)	81 %	6
Grain	Caramunich® typ I	0.5 kg (8.7%)	73 %	80
Grain	Weyermann - Carafa I	0.03 kg (0.5%)	70 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	70 min	7 %
Boil	East Kent Goldings	30 g	30 min	5.1 %
Boil	East Kent Goldings	15 g	15 min	5.1 %

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	7 g	Boil	15 min