

# Bitter

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- Gravity **12.1 BLG**
- ABV ---
- IBU **33**
- SRM **10.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **12.2 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2.1 kg (77.8%)	82 %	4
Grain	Amber Malt	0.2 kg (7.4%)	80 %	43
Grain	Caramel/Crystal Malt - 120L	0.4 kg (14.8%)	80 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	35 min	4.76 %
Aroma (end of boil)	Fuggles	25 g	30 min	4.76 %
Dry Hop	Fuggles	50 g	5 day(s)	4.76 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	7 g	Safale

## Notes

- 40g cukru do nagazowania  
*Mar 5, 2017, 2:47 PM*