

# Extra Bitter

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **8.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **23.5 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **22.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (85.1%)	80 %	7
Grain	Strzegom Karmel 150	0.3 kg (6.4%)	75 %	150
Grain	Płatki owsiane	0.4 kg (8.5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	5.1 %
Dry Hop	Lublin (Lubelski)	40 g	4 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Dry	11 g	---