

# Bitter-sweet memories

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **38**
- SRM **5.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

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

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (80%)	79 %	6
Grain	Strzegom Golden Ale	1 kg (16%)	80 %	10
Grain	Cara-Pils/Dextrine	0.25 kg (4%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	30 g	50 min	11.7 %
Boil	Challenger	10 g	30 min	7 %
Boil	Challenger	40 g	0 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
English Ale	Ale	Dry	10 g	Bulldog