

# 1

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU ---
- SRM **35.2**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **80 C**, Time **1 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **80C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	5 kg (86.2%)	80 %	8
Grain	Czekoladowy	0.5 kg (8.6%)	60 %	788
Grain	Jęczmień palony	0.3 kg (5.2%)	55 %	985

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale