

# Stout

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **17**
- SRM **33.5**
- Style **Sweet 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 **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **68 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **68C**
- Keep mash **70 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pale Ale Castlemalting	4.5 kg (64.3%)	83 %	8
Grain	Płatki pszeniczne	0.7 kg (10%)	60 %	3
Grain	Słód Żytni Czekoladowy	0.5 kg (7.1%)	60 %	650
Grain	Weyermann - Carafa II	0.3 kg (4.3%)	70 %	837
Grain	Caraaroma	0.1 kg (1.4%)	78 %	400
Grain	Crystal Castlemalting	0.2 kg (2.9%)	78 %	120
Sugar	Milk Sugar (Lactose)	0.7 kg (10%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	3.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale