

# Christmass Stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **20**
- SRM **36.7**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31.1 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.3 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (38.6%)	80 %	4
Grain	Viking Pale Ale malt	3.13 kg (40.3%)	80 %	5
Grain	Cara Blonde - Castle Malting	0.25 kg (3.2%)	78 %	20
Grain	Biscuit Malt	0.19 kg (2.4%)	79 %	45
Grain	Jęczmień palony	0.5 kg (6.4%)	55 %	985
Grain	Chocolate Malt (UK)	0.5 kg (6.4%)	73 %	887
Grain	Płatki owsiane	0.2 kg (2.6%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	15 g	60 min	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	anyż	5 g	Boil	10 min
Spice	przyprawa do piernika	5 g	Boil	10 min