

# STOUT

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **20**
- SRM **32.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **21.8 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (69.6%)	81 %	4
Grain	Płatki owsiane	0.85 kg (14.8%)	60 %	3
Grain	Briess - Chocolate Malt	0.45 kg (7.8%)	60 %	690
Grain	Jęczmień palony	0.45 kg (7.8%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	60 min	5.1 %
Aroma (end of boil)	Fuggles	30 g	10 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis