

## dry stout

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **25.6**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **11.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **78C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (76.9%)	80 %	7
Grain	płatki jęczmienne	0.4 kg (10.3%)	60 %	4
Grain	Jęczmień palony	0.25 kg (6.4%)	55 %	985
Grain	Strzegom Karmel 300	0.25 kg (6.4%)	70 %	299

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	7 %
Aroma (end of boil)	Challenger	10 g	5 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis