

## dry stout

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **33**
- SRM **41.9**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **9 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (83.3%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.5 kg (16.7%)	68 %	1000

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	15 g	30 min	11.2 %
Boil	Magnat	10 g	10 min	11.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	safale