

## Dry stout - clear

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **20.9**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **16.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.9 kg (84.8%)	80 %	5
Grain	Jęczmień palony	0.3 kg (6.5%)	55 %	985
Grain	płatki jęczmienne	0.4 kg (8.7%)	60 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	90 g	15 min	6.1 %