

## Dry stout

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **18**
- SRM **26**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **67 C**, Time **80 min**
- Temp **70 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (75%)	--- %	---
Grain	Strzegom Monachijski typ II	1 kg (16.7%)	79 %	22
Grain	Jęczmień palony	0.25 kg (4.2%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4.2%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	4.5 %
Aroma (end of boil)	Fuggles	30 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Fermentis