

## stout 2.0

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **33**
- SRM **39.4**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **18.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (49.2%)	80 %	6
Grain	Strzegom Pilzneński	1.5 kg (24.6%)	80 %	4
Grain	Strzegom Barwiący 1600	0.5 kg (8.2%)	65 %	1600
Grain	Płatki pszeniczne	0.4 kg (6.6%)	85 %	3
Grain	Płatki żytnie	0.4 kg (6.6%)	85 %	3
Grain	Strzegom Czekoladowy jasny	0.3 kg (4.9%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	8.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min