

## mk stout

---

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **36.4**

### Batch size

- Expected quantity of finished beer **3.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **3.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **4.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **3.4 liter(s)**
- Total mash volume **4.2 liter(s)**

### Steps

- Temp **63 C**, Time **40 min**
- Temp **66 C**, Time **20 min**

### Mash step by step

- Heat up **3.4 liter(s)** of strike water to **68.3C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **66C**
- Sparge using **1.7 liter(s)** of **76C** water or to achieve **4.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	0.7 kg (83.3%)	80 %	6
Grain	Chocolate Malt (US)	0.04 kg (4.8%)	60 %	690
Grain	Jęczmień palony	0.1 kg (11.9%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	4 g	60 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	3 g	Safale