

## #? Stout Kawowy

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **41**
- SRM **29.5**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **0 %**
- Size with trub loss **13 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **14.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **11.9 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **9.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **14.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.9 kg (71.7%)	80 %	5
Grain	Jęczmień niesłodowany	0.3 kg (11.3%)	65 %	2
Grain	Jęczmień palony	0.15 kg (5.7%)	55 %	985
Grain	Strzegom Czekoladowy jasny	0.2 kg (7.5%)	68 %	400
Grain	Carafa II special	0.1 kg (3.8%)	70 %	812

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Aroma (end of boil)	East Kent Goldings	15 g	15 min	5.1 %

### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
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Water Agent	kawa	100 g	Secondary	7 day(s)
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