

## Stout studies #1

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **23.1**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (70.8%)	80 %	5
Grain	Strzegom Wiedeński	0.4 kg (7.1%)	79 %	10
Grain	Brown Malt (British Chocolate)	0.3 kg (5.3%)	70 %	128
Grain	Caraaroma	0.1 kg (1.8%)	78 %	400
Grain	Strzegom Czekoladowy jasny	0.85 kg (15%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	7.6 %
Aroma (end of boil)	East Kent Goldings	30 g	0 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Slant	200 ml	Danstar