

## US Stout - simple TB

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **44**
- SRM **41.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **26 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.4 kg (51.9%)	80 %	5
Grain	Monachijski	1.25 kg (19.1%)	80 %	16
Grain	Simpsons - Coffee Malt	0.65 kg (9.9%)	74 %	296
Grain	Strzegom Karmel 300	0.35 kg (5.3%)	70 %	299
Grain	Jęczmień palony	0.55 kg (8.4%)	55 %	985
Grain	Chocolate Malt (US)	0.35 kg (5.3%)	60 %	690

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	60 min	13.2 %
Boil	Simcoe	25 g	15 min	13.2 %
Boil	Simcoe	20 g	5 min	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast - 1728 Scottish Ale	Ale	Slant	80 ml	Wyeast Labs
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