

## stout 5/2019

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **45**
- SRM **35.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **27.3 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **68 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **20.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **15 min** at **68C**
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3.5 kg (51.2%)	79 %	30
Grain	Strzegom Pilzneński	2 kg (29.3%)	80 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (7.3%)	79 %	22
Grain	Fawcett - Pale Chocolate	0.33 kg (4.8%)	71 %	600
Grain	Strzegom Czekoladowy 1200	0.3 kg (4.4%)	68 %	1200
Grain	black castlemalting 1300 ebc	0.2 kg (2.9%)	73.5 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	perle uniwersalny	30 g	60 min	7 %
Boil	Chinook goryczkowy	30 g	30 min	10 %
Boil	perle uniwersalny	20 g	10 min	7 %
Boil	Chinook goryczkowy	20 g	10 min	10 %

### Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Liquid	100 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	wirflloc t	2.5 g	Boil	5 min

### Notes

- słody ciemne wsypać na 15 min przed końcem warzenia  
*Mar 2, 2019, 9:33 AM*