

## STOUT 3

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- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **55**
- SRM **43.2**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **2 %**
- Size with trub loss **23.7 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **30.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **32.3 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **23.8 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **30.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	6 kg (70.6%)	79 %	6
Grain	Special B Castlemalting	0.75 kg (8.8%)	77 %	350
Grain	Strzegom Pszeniczny	0.5 kg (5.9%)	81 %	6
Grain	Płatki owsiane	0.5 kg (5.9%)	70 %	3
Grain	Weyermann -czekoladowy pszeniczny	0.4 kg (4.7%)	65 %	1000
Grain	Weyermann - Carafa II special	0.25 kg (2.9%)	65 %	1100
Grain	Fawcett - Chocolate	0.1 kg (1.2%)	71 %	1100

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	33 g	60 min	15.5 %
Boil	Chinook	10 g	20 min	13 %
Boil	Izabella	25 g	15 min	6 %
Boil	Izabella	25 g	5 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	węglan wapnia kreda	10 g	Mash	---
Flavor	skórka suszona pomaranczy	30 g	Boil	10 min
Fining	whirlfloc tabletki	1.2 g	Boil	7 min
Flavor	tonka	15 g	Secondary	6 day(s)

## Notes

- Tonka macerowana w burbonie 2 dni.  
*Jul 22, 2019, 8:02 PM*