

## Pastry Stout JO #2

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **37**
- SRM **55.7**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.3 liter(s)**

### Steps

- Temp **64 C**, Time **25 min**
- Temp **68 C**, Time **25 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **68C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	0.5 kg (13.9%)	80 %	5
Grain	Simpsons - Maris Otter	1 kg (27.9%)	81 %	6
Grain	CaraBody	0.4 kg (11.2%)	78 %	400
Grain	Caraaroma	0.11 kg (3.1%)	78 %	400
Grain	Weyermann - Carafa III	0.1 kg (2.8%)	70 %	1024
Grain	Płatki owsiane	0.6 kg (16.7%)	85 %	3
Grain	płatki jęczmienne	0.5 kg (13.9%)	80 %	3
Grain	Strzegom Czekoladowy ciemny	0.19 kg (5.3%)	1 %	1200
Grain	Jęczmień palony	0.035 kg (1%)	55 %	985
Grain	Weyermann - Carafa I	0.15 kg (4.2%)	70 %	900

### Hops

Use for	Name	Amount	Time	Alpha acid
---------	------	--------	------	------------

Boil	Magnum	13 g	60 min	11.5 %
Whirlpool	pilgrim	25 g	10 min	10.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us 04	Ale	Dry	6 g	---

## Extras

Type	Name	Amount	Use for	Time
Other	laktoza	250 g	Boil	15 min
Water Agent	chlorek wapnia 33%	4.5 g	Mash	90 min
Flavor	płatki koniac	15 g	Secondary	10 day(s)
Flavor	płatki high mocca	11 g	Secondary	10 day(s)
Flavor	tonka	8 g	Secondary	5 day(s)
Flavor	aromat waniliowy	2 g	Secondary	1 day(s)
Water Agent	soda oczyszczona	2 g	Mash	90 min

## Notes

- chlorek w ml  
Mar 21, 2020, 5:07 PM