

## czokolate muskowado staft #6

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- Gravity **12.4 BLG**
- ABV ---
- IBU **22**
- SRM **40**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **33.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

### Steps

- Temp **54 C**, Time **15 min**
- Temp **69 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **33.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	1 kg (17.4%)	79 %	22
Grain	Strzegom Pale Ale	2 kg (34.8%)	79 %	6
Grain	Żytni	1 kg (17.4%)	85 %	8
Grain	Weyermann - Dehusked Carafo III	0.4 kg (7%)	70 %	1024
Grain	Strzegom Czekoladowy ciemny	0.4 kg (7%)	68 %	1200
Grain	Strzegom Karmel 300	0.5 kg (8.7%)	70 %	299
Grain	Jęczmień palony	0.15 kg (2.6%)	55 %	985
Sugar	Brown Sugar, Dark	0.3 kg (5.2%)	100 %	99

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	10 g	60 min	10.5 %
Boil	Kent Goldings	15 g	15 min	5.5 %
Boil	Kent Goldings	15 g	30 min	5.5 %

Boil	Kent Goldings	20 g	5 min	5.5 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Irish Ale	Ale	Liquid	1000 ml	Wyeast Labs

### Extras

Type	Name	Amount	Use for	Time
Spice	Lukrecja	15 g	Boil	5 min