

## tropical stout

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- Gravity **17.7 BLG**
- ABV ---
- IBU **50**
- SRM **47.7**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (74.6%)	80 %	7
Grain	Strzegom Czekoladowy ciemny	0.4 kg (6%)	68 %	1200
Grain	Strzegom Karmel 300	0.4 kg (6%)	70 %	299
Grain	Pszeniczny	0.4 kg (6%)	85 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (7.5%)	79 %	22

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Amarillo	20 g	20 min	9.5 %
Boil	Lemon drop	20 g	15 min	4.6 %
Boil	Lemon drop	20 g	10 min	4.6 %
Boil	Citra	15 g	5 min	12 %
Dry Hop	Lemon drop	50 g	5 day(s)	4.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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us 04	Ale	Dry	20 g	---
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