

# Tropical Stout 2018

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- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **34.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **23.8 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **17.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (74.1%)	80 %	5
Grain	Special B Castle	0.1 kg (1.5%)	70 %	350
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.7%)	68 %	1200
Grain	Weyermann - Carafa III	0.25 kg (3.7%)	70 %	1024
Grain	Jęczmień palony	0.1 kg (1.5%)	55 %	985
Grain	Strzegom Karmel 300	0.25 kg (3.7%)	70 %	299
Sugar	muscovado	0.4 kg (5.9%)	94 %	49
Sugar	Dememera Sugar	0.4 kg (5.9%)	100 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	50 g	60 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11 g	Safale
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