

# Tropical Stout 2019

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **27**
- SRM **32.4**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **15.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **11.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (69%)	80 %	5
Grain	Special B Castle	0.1 kg (2.3%)	70 %	350
Grain	Strzegom Czekoladowy 400	0.25 kg (5.7%)	68 %	400
Grain	Weyermann - Carafa III	0.25 kg (5.7%)	70 %	1024
Grain	Strzegom Karmel 300	0.25 kg (5.7%)	70 %	299
Sugar	muscovado	0.25 kg (5.7%)	94 %	49
Sugar	Dememera Sugar	0.25 kg (5.7%)	100 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	7.5 g	Safale