

# Tropical Stout

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **28**
- SRM **49**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **25.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **66 C**, Time **90 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (53.2%)	80 %	5
Grain	Płatki owsiane	1 kg (10.6%)	85 %	3
Grain	Fawcett - Dark Crystal	0.5 kg (5.3%)	71 %	300
Grain	Special B Malt	0.5 kg (5.3%)	65.2 %	315
Grain	Weyermann - Chocolate Rye	0.25 kg (2.7%)	20 %	493
Grain	Weyermann - Chocolate Wheat	0.25 kg (2.7%)	74 %	788
Grain	Carafa	0.25 kg (2.7%)	70 %	664
Sugar	Brown Sugar, Dark	0.5 kg (5.3%)	100 %	99
Sugar	Milk Sugar (Lactose)	0.5 kg (5.3%)	76.1 %	0
Sugar	Molasses	0.4 kg (4.3%)	78.3 %	158
Grain	Jęczmień palony	0.25 kg (2.7%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	55 g	60 min	6 %
Boil	Cascade	45 g	5 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis