

# Tropical Stout

- Gravity **13.1 BLG**
- ABV ---
- IBU **38**
- SRM **50.5**
- Style **Fruit Beer**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **0 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (70.2%)	80 %	7
Grain	Fawcett - Pszeniczny Czekoladowy	1 kg (17.5%)	73 %	1001
Grain	Strzegom Karmel 150	0.5 kg (8.8%)	75 %	150
Grain	Jęczmień palony	0.2 kg (3.5%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Merkur	15 g	40 min	14 %
Boil	Merkur	15 g	15 min	14 %
Boil	Huell Melon	30 g	10 min	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Mango	1.5 g	Mash	50 min
Flavor	Mango (puszka)	2 g	Secondary	14 day(s)