# **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**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg <i>(53.2%)</i>	80 %	5
Grain	Płatki owsiane	1 kg (10.6%)	85 %	3
Grain	Fawcett - Dark Crystal	0.5 kg <i>(5.3%)</i>	71 %	300
Grain	Special B Malt	0.5 kg <i>(5.3%)</i>	65.2 %	315
Grain	Weyermann - Chocolate Rye	0.25 kg <i>(2.7%)</i>	20 %	493
Grain	Weyermann - Chocolate Wheat	0.25 kg (2.7%)	74 %	788
Grain	Carafa	0.25 kg <i>(2.7%)</i>	70 %	664
Sugar	Brown Sugar, Dark	0.5 kg <i>(5.3%)</i>	100 %	99
Sugar	Milk Sugar (Lactose)	0.5 kg <i>(5.3%)</i>	76.1 %	0
Sugar	Molasses	0.4 kg <i>(4.3%)</i>	78.3 %	158
Grain	Jęczmień palony	0.25 kg <i>(2.7%)</i>	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	Туре	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis