

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 |