

Tropical Stout 2018

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **34.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (74.1%) | 80 % | 5 |
| Grain | Special B Castle | 0.1 kg (1.5%) | 70 % | 350 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (3.7%) | 68 % | 1200 |
| Grain | Weyermann - Carafa III | 0.25 kg (3.7%) | 70 % | 1024 |
| Grain | Jęczmień palony | 0.1 kg (1.5%) | 55 % | 985 |
| Grain | Strzegom Karmel 300 | 0.25 kg (3.7%) | 70 % | 299 |
| Sugar | muscovado | 0.4 kg (5.9%) | 94 % | 49 |
| Sugar | Dememera Sugar | 0.4 kg (5.9%) | 100 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 50 g | 60 min | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-----|------|--------|
| Safale S-04 | Ale | Dry | 11 g | Safale |
|-------------|-----|-----|------|--------|