

Tropical Stout

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **25**
- SRM **37.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.9 kg (61.6%) | 80 % | 5 |
| Grain | Barley, Flaked | 0.6 kg (9.5%) | 70 % | 4 |
| Grain | Special B Castle | 0.1 kg (1.6%) | 70 % | 350 |
| Grain | Strzegom Czekoladowy 400 | 0.2 kg (3.2%) | 68 % | 400 |
| Grain | Weyermann - Carafa III | 0.25 kg (3.9%) | 70 % | 1024 |
| Grain | Jęczmień palony | 0.35 kg (5.5%) | 55 % | 985 |
| Grain | Strzegom Karmel 300 | 0.25 kg (3.9%) | 70 % | 299 |
| Sugar | muscovado | 0.68 kg (10.7%) | 94 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 35 g | 60 min | 8 % |

Yeasts

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

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