

tropical stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **58**
- SRM **40.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **21.7 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 4.5 kg (72.6%) | 80 % | 7 |
| Grain | Strzegom Czekoladowy ciemny | 0.5 kg (8.1%) | 68 % | 1200 |
| Grain | Strzegom Karmel 300 | 0.25 kg (4%) | 70 % | 299 |
| Grain | Pszeniczny | 0.25 kg (4%) | 85 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (8.1%) | 79 % | 22 |
| Grain | Jęczmień palony | 0.1 kg (1.6%) | 55 % | 985 |
| Grain | Carafa | 0.1 kg (1.6%) | 70 % | 664 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|----------|------------|
| Whirlpool | Galaxy | 100 g | 30 min | 15 % |
| Dry Hop | Galaxy | 100 g | 1 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 04 | Ale | Dry | 20 g | --- |