

Stout us

- Gravity **17.5 BLG**
- ABV ---
- IBU **63**
- SRM **42**
- Style **American 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 **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **15 min**
- Temp **83 C**, Time **3 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **74C**
- Keep mash **3 min** at **83C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5 kg (73.5%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (4.4%) | 68 % | 1200 |
| Grain | Strzegom Karmel 150 | 1 kg (14.7%) | 75 % | 150 |
| Grain | Chit Malt | 0.5 kg (7.4%) | 50 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Galena | 50 g | 60 min | 12 % |
| Boil | Lemon drop | 15 g | 15 min | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 10 g | Safale |