

stout festiwal

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **44.5**
- Style **Oatmeal 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 **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **14 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 | 2 kg (44.4%) | 80 % | 5 |
| Grain | Żytni | 1.5 kg (33.3%) | 85 % | 8 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (6.7%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.4 kg (8.9%) | 55 % | 1400 |
| Grain | Strzegom Karmel 300 | 0.3 kg (6.7%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Warrior | 15 g | 60 min | 15.5 % |
| Boil | Hallertau | 15 g | 10 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |