

mały dym

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **36**
- SRM **37.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **12 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **68 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **75 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.3 kg (55%) | 79 % | 6 |
| Grain | Słód Wędzony Steinbach | 1 kg (16.7%) | 80 % | 5 |
| Grain | Brown Malt (British Chocolate) | 0.3 kg (5%) | 70 % | 128 |
| Grain | Briess - Chocolate Malt | 0.3 kg (5%) | 60 % | 690 |
| Grain | Fawcett - Pale Chocolate | 0.3 kg (5%) | 71 % | 600 |
| Grain | Jęczmień palony | 0.4 kg (6.7%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.4 kg (6.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 35 g | 60 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 12 g | Safale |