

#1

- Gravity **17.4 BLG**
- ABV ---
- IBU **47**
- SRM **40**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **24.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale | 6 kg (78.9%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 0.6 kg (7.9%) | 79 % | 16 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (3.9%) | 68 % | 1200 |
| Adjunct | Płatki jęczmienne | 0.4 kg (5.3%) | --- % | --- |
| Adjunct | Jęczmień prażony | 0.3 kg (3.9%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 30 g | 60 min | 19 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |