

CiemZyto

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **53**
- SRM **51.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **2.75 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **68 C**, Time **75 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **76.7C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (39.3%) | 80 % | 5 |
| Grain | Żytni | 2 kg (26.2%) | 85 % | 8 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (6.6%) | 79 % | 22 |
| Grain | Płatki pszeniczne | 0.5 kg (6.6%) | 85 % | 3 |
| Grain | Płatki żytnie | 0.5 kg (6.6%) | 85 % | 3 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.75 kg (9.8%) | 73 % | 1001 |
| Grain | Carafa III | 0.25 kg (3.3%) | 70 % | 1034 |
| Grain | Jęczmień palony | 0.125 kg (1.6%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | Centennial | 50 g | 60 min | 10.5 % |
| Aroma (end of boil) | East Kent Goldings | 25 g | 15 min | 5.1 % |

Yeasts

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