

PrzePALONY

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **43**
- SRM **55.5**
- Style **Foreign Extra 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 **20 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (57.1%) | 80 % | 5 |
| Grain | Monachijski | 1 kg (14.3%) | 80 % | 16 |
| Grain | Jęczmień palony | 0.5 kg (7.1%) | 55 % | 985 |
| Grain | Carafa | 0.25 kg (3.6%) | 70 % | 664 |
| Grain | Carafa II | 0.25 kg (3.6%) | 70 % | 812 |
| Grain | Karmelowy żytni Strzegom | 0.25 kg (3.6%) | 75 % | 150 |
| Grain | Strzegom pszenica prażona | 0.25 kg (3.6%) | 70 % | 1000 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (3.6%) | 68 % | 1200 |
| Grain | Płatki owsiane | 0.25 kg (3.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 45 g | 30 min | 13.5 % |

Yeasts

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