

# 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     |