

# 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