

# Ciemne Pszeniczne

- Gravity **13.1 BLG**
- ABV ---
- IBU **38**
- SRM **21.3**
- Style **Dunkelweizen**

## 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

## Steps

- Temp **43 C**, Time **20 min**
- Temp **63 C**, Time **30 min**
- Temp **71 C**, Time **30 min**

## Mash step by step

- Heat up **13.2 liter(s)** of strike water to **46.8C**
- Add grains
- Keep mash **20 min** at **43C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **71C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	3 kg (68.2%)	81 %	6
Grain	Monachijski	0.7 kg (15.9%)	80 %	16
Grain	Strzegom Karmel 300	0.2 kg (4.5%)	70 %	299
Grain	Caraaroma	0.2 kg (4.5%)	78 %	400
Grain	Special B Castle	0.2 kg (4.5%)	70 %	350
Grain	Czekoladowy	0.1 kg (2.3%)	60 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	10 g	60 min	17 %
Boil	Waimea	10 g	20 min	17 %
Boil	Waimea	10 g	7 min	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	200 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	20 g	Boil	5 min