

# Pszenicznik ciemny

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **13**
- SRM **11**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **45 C**, Time **20 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2 kg (39.6%)	85 %	4
Grain	Monachijski	2.5 kg (49.5%)	80 %	16
Grain	Weyermann - Carawheat	0.35 kg (6.9%)	77 %	97
Grain	Strzegom Karmel 300	0.2 kg (4%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	30 g	60 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	1500 ml	Fermentum Mobile