

# 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 |