

# Pszenica ciemniej

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **28**
- SRM **6.7**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **25.4 liter(s)**

## Steps

- Temp **45 C**, Time **10 min**
- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.7 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Weyermann - Dark Wheat Malt | 2 kg (35.5%)   | 85 %  | 14  |
| Grain | Weyermann Monachiski I      | 2 kg (35.5%)   | 80 %  | 16  |
| Grain | Viking Vienna Malt          | 1 kg (17.7%)   | 79 %  | 7   |
| Grain | Weyermann - Acidulated Malt | 0.14 kg (2.5%) | 65 %  | 6   |
| Grain | Viking Wheat Malt           | 0.5 kg (8.9%)  | 83 %  | 5   |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Cascade PL | 28 g   | 60 min | 8 %        |
| Boil    | Fuggles    | 30 g   | 25 min | 4.2 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                        |       |        |       |                  |
|------------------------|-------|--------|-------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 40 ml | Fermentum Mobile |
|------------------------|-------|--------|-------|------------------|

### Extras

| Type   | Name         | Amount | Use for | Time  |
|--------|--------------|--------|---------|-------|
| Fining | Łuska Ryżowa | 150 g  | Mash    | 5 min |

### Notes

- Chmiel szyszka mieszanka cascade usa ok. 6 % plus chinook usa ok.12 %. Zakładam około 8 % alfa kwasów.  
*Apr 29, 2023, 1:17 PM*
- Goryczka uzyskana z szyszki chmielu słabo wyczuwalna wymusiła dodanie chmielu w granulacie jak w przepisie.  
*May 3, 2023, 10:17 AM*