

Ciemny pszenicznik

- Gravity **13.6 BLG**
- ABV ---
- IBU **14**
- SRM **23.9**
- 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **45 C**, Time **20 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **20 min** at **45C**
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Pszeniczny | 2 kg (40.9%) | 85 % | 4 |
| Grain | Pilzneński | 2 kg (40.9%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.3 kg (6.1%) | 79 % | 22 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (5.1%) | 73 % | 1001 |
| Grain | karmelowy ciemny | 0.34 kg (7%) | 68 % | 300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 10 g | 60 min | 10.6 % |
| Boil | Saaz | 20 g | 5 min | 2.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 100 ml | Fermentum Mobile |