

## Pszeniczne ciemne

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **10**
- SRM **9.1**
- Style **Dunkelweizen**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **16.2 liter(s)**

### Steps

- Temp **45 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **12.1 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount         | Yield | EBC  |
|-------|----------------------------------|----------------|-------|------|
| Grain | Pilzneński                       | 1.3 kg (32.1%) | 81 %  | 4    |
| Grain | Pszeniczny                       | 1.9 kg (46.9%) | 85 %  | 4    |
| Grain | Strzegom Monachijski typ II      | 0.6 kg (14.8%) | 79 %  | 22   |
| Grain | Carawheat (GR)                   | 0.2 kg (4.9%)  | 68 %  | 79   |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.05 kg (1.2%) | 73 %  | 1001 |

### Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Hallertau | 10 g   | 70 min | 4.5 %      |
| Boil    | Hallertau | 10 g   | 30 min | 4.5 %      |
| Boil    | Hallertau | 10 g   | 5 min  | 4.5 %      |

### Yeasts

| Name          | Type  | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Safbrew WB-06 | Wheat | Dry  | 11.5 g | Safbrew    |

## Notes

- W 72 C po negatywnej próbie jodowej dodać słód czekoladowy.  
*Feb 10, 2019, 4:37 PM*
- Ferm. burz. 7-10 dni w temp. 18-20 C.  
Refermentacja 14 dni w temp. 18-20 C.  
*Feb 10, 2019, 4:47 PM*