

Ciemny pszeniczny

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **14**
- SRM **18.8**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **9.4 liter(s)** of strike water to **48.9C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Monachijski | 1.2 kg (40.7%) | 80 % | 16 |
| Grain | Pszeniczny | 1.4 kg (47.5%) | 85 % | 4 |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (6.8%) | 73 % | 120 |
| Grain | Briess - Dark Chocolate Malt | 0.15 kg (5.1%) | 60 % | 827 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 15 g | 30 min | 5.5 % |
| Boil | Sybillia | 10 g | 10 min | 3.5 % |

Yeasts

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