

Pszeniczne Ciemne Twój Browar

- Gravity **11.3 BLG**
- ABV ---
- IBU **15**
- SRM **25**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.4 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|-----------------|--------|------|
| Grain | Pszeniczny | 2.75 kg (53.7%) | 82 % | 4 |
| Grain | Monachijski | 1 kg (19.5%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 1 kg (19.5%) | 79 % | 6 |
| Grain | Karmelowy ciemny | 0.25 kg (4.9%) | 68 % | 650 |
| Grain | Czekoladowy | 0.12 kg (2.3%) | 72.7 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 37 g | 60 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M20 Bavarian Wheat | Wheat | Dry | 10 g | Mangrove Jack's |