

Pszeniczne Ciemne

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **12**
- SRM **23.1**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **100 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **63C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2.2 kg (47.3%)	85 %	4
Grain	Monachijski	0.8 kg (17.2%)	80 %	16
Grain	Strzegom Wiedeński	0.8 kg (17.2%)	79 %	10
Grain	Strzegom Karmel 300	0.2 kg (4.3%)	70 %	299
Grain	Strzegom Czekoladowy 1200	0.25 kg (5.4%)	68 %	1202
Grain	Płatki pszeniczne	0.4 kg (8.6%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %

Yeasts

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