

Ciemne Pszeniczne

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **14**
- SRM **24.4**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **49.7C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.5 kg (31.9%)	81 %	4
Grain	Pszeniczny	2 kg (42.6%)	85 %	4
Grain	Strzegom Monachijski typ II	0.6 kg (12.8%)	79 %	22
Grain	Weyermann - Carawheat	0.2 kg (4.3%)	77 %	97
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (8.5%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	25 g	60 min	4.5 %
Aroma (end of boil)	Hallertau	25 g	3 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	11 g	Mangrove Jack's
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