

# 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 sól 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*