

Pszeniczne ciemne

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **15**
- SRM **14.6**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **10 %**
- Size with trub loss **46 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **55.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.8 liter(s)**
- Total mash volume **38.4 liter(s)**

Steps

- Temp **44 C**, Time **5 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **28.8 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **5 min** at **44C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **36 liter(s)** of **76C** water or to achieve **55.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	5 kg (52.1%)	85 %	4
Grain	Briess - Munich Malt 20L	2 kg (20.8%)	74 %	39
Grain	Chocolate Malt - Thomas Fawcett	0.2 kg (2.1%)	70 %	1175
Grain	Strzegom Karmel 150	0.4 kg (4.2%)	75 %	150
Grain	Strzegom Wiedeński	2 kg (20.8%)	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	60 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	200 ml	Fermentum Mobile