

Czarna Pszenica

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **12**
- SRM **17.8**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **27.8 liter(s)**
- Total mash volume **35.7 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **27.8 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **40 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Dark Wheat Malt	3.5 kg (44.1%)	85 %	14
Grain	Strzegom Monachijski typ II	2.2 kg (27.7%)	79 %	22
Grain	Strzegom Pilzneński	2 kg (25.2%)	80 %	4
Grain	Carafa III	0.23 kg (2.9%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	40 g	30 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Slant	150 ml	Fermentum Mobile