

Czorny Pszenicznia

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **19.4**
- Style **Dunkelweizen**

Batch size

- Expected quantity of finished beer **49 liter(s)**
- Trub loss **4 %**
- Size with trub loss **51 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **70.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.2 liter(s)**
- Total mash volume **45.6 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **34.2 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **48 liter(s)** of **76C** water or to achieve **70.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Czekoladowy ciemny	0.5 kg (4.4%)	68 %	1100
Grain	cookie	1.5 kg (13.2%)	72 %	50
Grain	Karmelowy Pszeniczny Strzegom	1 kg (8.8%)	70 %	100
Grain	Monachijski Ciemny	4 kg (35.1%)	78 %	22
Grain	Pszeniczny	4 kg (35.1%)	82 %	4
Grain	Płatki owsiane	0.4 kg (3.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	6.8 %
Boil	Marynka	50 g	30 min	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM41 Gwoździe i Banany	Wheat	Slant	250 ml	Fermentum Mobile
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