

# Czorny Pszenicznik

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **20.2**
- Style **Dunkelweizen**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **36.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 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 **18 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 **24.8 liter(s)** of **76C** water or to achieve **36.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4.2%)	68 %	1100
Grain	cookie	0.5 kg (8.3%)	72 %	50
Grain	Karmelowy Pszeniczny Strzegom	0.75 kg (12.5%)	70 %	100
Grain	Monachijski Ciemny	2 kg (33.3%)	78 %	22
Grain	Pszeniczny	2 kg (33.3%)	82 %	4
Grain	Płatki owsiane	0.5 kg (8.3%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bulldog Bramling	10 g	60 min	7.6 %
Boil	Bulldog Bramling	10 g	30 min	7.6 %
Boil	Bulldog Bramling	10 g	20 min	7.6 %
Boil	Bulldog Bramling	10 g	15 min	7.6 %

Boil	Bulldog Bramling	10 g	10 min	7.6 %
Boil	Bulldog Bramling	10 g	5 min	7.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Wheat	Liquid	30 ml	Fermentum Mobile