

# Robust Porter z płatkami średnio opiekаныmi

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **24**
- SRM **44**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **26.8 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (25.4%)	--- %	4
Grain	Strzegom Monachijski typ I	2 kg (33.9%)	79 %	16
Grain	Strzegom Pale Ale	1 kg (16.9%)	80 %	6
Grain	Viking Malt Czekoladowy jasny	0.3 kg (5.1%)	70 %	400
Grain	Strzegom Karmel 150	0.25 kg (4.2%)	75 %	150
Grain	Viking Malt Czekoladowy ciemny	0.3 kg (5.1%)	68 %	1000
Grain	Jęczmień palony	0.3 kg (5.1%)	--- %	985
Grain	Strzegom Barwiący	0.25 kg (4.2%)	--- %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	25 g	60 min	7 %
Boil	Challenger	10 g	30 min	7 %
Boil	Challenger	10 g	10 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Płatki dębowe średnio opiekane	30 g	Secondary	15 day(s)

## Notes

- Jęczmień Palony i sól barwiący na ostatnie 15min  
Płatki dębowe średnio opiekane zagotowane 3 min na siteczku  
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