

# Imperial stout i dry z wyslodek

- Gravity **24.2 BLG**
- ABV **11.2 %**
- IBU **51**
- SRM **38.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **21.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **28.9 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (64.1%)	80 %	7
Grain	Monachijski Ciemny Steinbach	1 kg (12.8%)	100 %	30
Grain	Płatki owsiane	0.8 kg (10.3%)	85 %	3
Grain	Płatki Jeczmienne	0.4 kg (5.1%)	85 %	---
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (5.1%)	73 %	1001
Grain	Jęczmień palony	0.2 kg (2.6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	45 g	60 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	23 g	safale