

## PS#4

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **85**
- SRM **55.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30.6 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **90 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **90 min** at **68C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód wędzony torfem	5 kg (58.5%)	75 %	10
Grain	Strzegom pszenica prażona	0.55 kg (6.4%)	70 %	1000
Grain	Strzegom Czekoladowy ciemny	0.25 kg (2.9%)	68 %	1200
Grain	Karmelowy żytni Strzegom	0.33 kg (3.9%)	75 %	150
Grain	Black Barley (Roast Barley)	0.32 kg (3.7%)	55 %	985
Grain	Jęczmień niesłodowany	0.4 kg (4.7%)	75 %	2
Grain	Płatki owsiane	0.4 kg (4.7%)	85 %	3
Sugar	KANDYZOWANY	0.5 kg (5.8%)	--- %	---
Grain	Płatki pszeniczne	0.3 kg (3.5%)	85 %	3
Grain	Pilzneński	0.5 kg (5.8%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Herkules	40 g	50 min	17 %
Boil	Chinook	45 g	50 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	SOK Z CYTRYNY	70 g	Mash	---
Flavor	PŁATKI DĘBOWE OPIEKANE MACEROWANE RUM 80%	50 g	Secondary	---

## Notes

- EKSPERYMENTUJEMY JAK ZAWSZE  
*Jul 23, 2017, 1:00 PM*