

## RIS - [1]

- Gravity **23.8 BLG**
- ABV **10.9 %**
- IBU **73**
- SRM **88**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.1 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **62 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **90 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **2.1 liter(s)** of **76C** water or to achieve **17.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (40%)	79 %	6
Grain	Strzegom Monachijski typ II	1 kg (13.3%)	80 %	22
Grain	Płatki owsiane	0.5 kg (6.7%)	85 %	3
Grain	Fawcett - Crystal	1 kg (13.3%)	70 %	160
Grain	Fawcett - Crystal Pszeniczny	0.5 kg (6.7%)	82 %	6
Grain	Fawcett - Pale Chocolate	0.5 kg (6.7%)	71 %	600
Grain	Weyermann - Carafa III special	0.5 kg (6.7%)	65 %	1400
po 30 minucie zacierania				
Grain	CastleMalting - Jęczmień palony	0.5 kg (6.7%)	60 %	1350
wygrzew				

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	60 g	60 min	11 %
Boil	lunga	5 g	20 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Yeast & Nutrient	Wine	Dry	14 g	Bulldog

## Extras

Type	Name	Amount	Use for	Time
Flavor	Płatki dębowe Whisky	50 g	Secondary	30 day(s)