

## RIS beta

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- Gravity **32 BLG**
- ABV **16.3 %**
- IBU **77**
- SRM **64.4**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **33.6 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **24 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (48.5%)	80 %	3
Grain	Strzegom Czekoladowy 1200	1 kg (9.7%)	68 %	1202
Grain	Strzegom pszenica prażona	1 kg (9.7%)	70 %	6
Grain	Caraamber	1 kg (9.7%)	75 %	59
Grain	Abbey Malt Weyermann	0.5 kg (4.9%)	75 %	45
Grain	Carabelge	0.5 kg (4.9%)	74 %	30
Grain	Barley, Flaked	0.6 kg (5.8%)	70 %	4
Sugar	Candi Sugar, Clear	0.7 kg (6.8%)	78.3 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	50 g	60 min	13.2 %
Boil	Simcoe	50 g	30 min	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	15 ml	Fermentum Mobile
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