

RIS_NH

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **75**
- SRM **47**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.75 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **65 C**, Time **90 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **90 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **3.6 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Jęczmień palony	0.38 kg (9.5%)	55 %	1100
Grain	Słód pszeniczny Bestmalz	0.2 kg (5%)	82 %	5
Grain	Carabelge	0.38 kg (9.5%)	80 %	30
Grain	Strzegom Pilzneński	1.65 kg (41.1%)	80 %	4
Grain	Viking Pale Ale malt	1.4 kg (34.9%)	90 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	80 min	4 %
Boil	Marynka	30 g	80 min	6.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	200 ml	Fermentum Mobile