

RIS

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **52**
- SRM **53.2**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **3 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (39.1%)	80 %	5
Grain	Żytni	2 kg (31.3%)	85 %	8
Grain	Strzegom Monachijski typ I	1 kg (15.6%)	79 %	16
Grain	Strzegom Karmel 300	0.2 kg (3.1%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.4 kg (6.3%)	68 %	1200
Grain	Jęczmień palony	0.3 kg (4.7%)	55 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Boil	Sybilla	20 g	20 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	500 ml	Fermentum Mobile