

Heavy day

- Gravity **24 BLG**
- ABV **11 %**
- IBU **73**
- SRM **66.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **28.5 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Ireks pale ale	4 kg (40.8%)	85 %	5
Grain	Ireks monachijski	2 kg (20.4%)	75 %	15
Grain	Płatki pszeniczne	2 kg (20.4%)	85 %	3
Grain	Carafa	0.3 kg (3.1%)	70 %	664
Grain	Ireks Black malt	0.5 kg (5.1%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (1%)	55 %	985
Sugar	Candi Sugar, Dark	0.3 kg (3.1%)	78.3 %	542
Grain	Ireks pszeniczny palony	0.6 kg (6.1%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	30 g	60 min	11 %
Boil	Simcoe	28.3 g	30 min	27 %
Aroma (end of boil)	East Kent Goldings	50 g	15 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale S-04	Ale	Dry	30 g	Safale
-------------	-----	-----	------	--------