

## DEF

- Gravity **23.8 BLG**
- ABV **10.9 %**
- IBU **54**
- SRM **42**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **35.5 liter(s)**
- Total mash volume **47.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **35.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (50.6%)	80 %	7
Grain	Monachijski	3 kg (25.3%)	80 %	16
Grain	Cookie	1 kg (8.4%)	75 %	70
Grain	Karmelowy	1 kg (8.4%)	75 %	300
Grain	Strzegom Czekoladowy 400	0.5 kg (4.2%)	68 %	400
Grain	Carafa III	0.15 kg (1.3%)	70 %	1034
Grain	Strzegom Czekoladowy ciemny	0.1 kg (0.8%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (0.8%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	120 min	15.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Iutra	Ale	Slant	50 ml	---