

## #18 RIS

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **78**
- SRM **35.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.8 liter(s)**
- Total mash volume **35.7 liter(s)**

### Steps

- Temp **67 C**, Time **0 min**

### Mash step by step

- Heat up **26.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **0 min** at **67C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop - pilzneński	3.7 kg (41.5%)	80 %	4
Grain	Malteurop - Pale Ale	0.81 kg (9.1%)	80 %	6
Grain	Słodownia Strzegom - monachijski I	3.25 kg (36.4%)	79 %	12
Grain	Słodownia Strzegom - czekoladowy 400	0.15 kg (1.7%)	70 %	400
Grain	Weyermann - Caramunich II	0.07 kg (0.8%)	75 %	120
Grain	Weyermann - Caramunich III	0.09 kg (1%)	75 %	150
Grain	Weyermann - Caramunich I	0.1 kg (1.1%)	75 %	90
Grain	Weyermann - Carared	0.12 kg (1.3%)	75 %	45
Grain	Weyermann - Caraamber	0.03 kg (0.3%)	75 %	70
Grain	Słodownia Strzegom - karmelowy 600	0.2 kg (2.2%)	69 %	600
Grain	Weyermann - jęczmień palony	0.35 kg (3.9%)	80 %	1100
Grain	Weyermann - Carafa I	0.05 kg (0.6%)	70 %	689

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	30 g	60 min	15.3 %
Boil	Marynka	37 g	30 min	9.4 %
Boil	Citra	30 g	5 min	13.5 %
Boil	Challenger	23 g	5 min	5.8 %
Boil	Columbus/Tomahawk/Zeus	30 g	10 min	15 %

## Extras

Type	Name	Amount	Use for	Time
Other	Płatki owsiane	0 g	Boil	60 min