

## Bies

- Gravity **25.5 BLG**
- ABV **12 %**
- IBU **79**
- SRM **44.8**
- 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 **120 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.5 liter(s)**
- Total mash volume **46 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (41.7%)	79 %	6
Grain	Strzegom Golden Ale	1 kg (8.3%)	80 %	10
Grain	Strzegom Monachijski typ II	3 kg (25%)	79 %	22
Grain	Płatki owsiane	0.5 kg (4.2%)	85 %	3
Grain	Caramel sweet	0.5 kg (4.2%)	50 %	60
Grain	Caramel Aromatic	0.5 kg (4.2%)	50 %	180
Sugar	Moscavado	0.5 kg (4.2%)	90 %	180
Grain	Jęczmień palony	0.5 kg (4.2%)	55 %	985
Grain	Żytni czekoladowy	0.5 kg (4.2%)	65 %	650

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	30 g	30 min	17.2 %
Boil	Summit	50 g	60 min	17 %
Boil	Puławski	50 g	10 min	4.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	1000 ml	Fermentum Mobile