

## COS

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **50**
- SRM **37.1**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.8 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (26.1%)	80 %	4
Grain	Monachijski	1.3 kg (17%)	80 %	16
Grain	Viking Pale Ale malt	1 kg (13.1%)	80 %	5
Grain	Caraaroma	0.5 kg (6.5%)	78 %	400
Grain	Strzegom Czekoladowy 400	0.5 kg (6.5%)	68 %	400
Grain	Pszeniczny	1 kg (13.1%)	85 %	4
Grain	Chocolate Malt (UK)	0.35 kg (4.6%)	73 %	887
Grain	Karmelowy Pszeniczny Strzegom	0.3 kg (3.9%)	79 %	130
Sugar	Milk Sugar (Lactose)	0.7 kg (9.2%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	40 g	50 min	15.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	10 g	Mangrove Jack's