

## Porter z jeżynami

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **36**
- SRM **34.5**

### 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 **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (75.8%)	80 %	4
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (7.6%)	73 %	120
Grain	Czekoladowy	0.5 kg (7.6%)	60 %	788
Grain	Carafa II	0.2 kg (3%)	70 %	812
Grain	Simpsons - Coffee Malt	0.2 kg (3%)	74 %	296
Grain	Viking melanoidynowy	0.2 kg (3%)	75 %	60

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	60 min	13.2 %
Boil	Centennial	20 g	15 min	10.5 %
Aroma (end of boil)	Centennial	20 g	0 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale