

## Robust porter

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **26.7**
- Style **Robust Porter**

### 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	3.5 kg (53.8%)	79 %	22
Grain	Viking Pale Ale malt	2.1 kg (32.3%)	80 %	5
Grain	Strzegom Czekoladowy 400	0.4 kg (6.2%)	68 %	400
Grain	Strzegom Karmel 300	0.15 kg (2.3%)	70 %	299
Grain	Strzegom Karmel 600	0.15 kg (2.3%)	68 %	601
Grain	Strzegom Pszeniczny	0.1 kg (1.5%)	81 %	6
Grain	Strzegom pszenica prażona	0.1 kg (1.5%)	70 %	1000

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.8 %
Boil	Perle	30 g	15 min	7 %
Aroma (end of boil)	Perle	30 g	0 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	111 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Flavor	kakao	400 g	Boil	5 min