

Czarnuch

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **34**
- SRM **42.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **100 liter(s)**
- Trub loss **5 %**
- Size with trub loss **105 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **126.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **100.2 liter(s)**
- Total mash volume **133.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	12 kg (34.4%)	80 %	7
Grain	Briess - Bonlander Munich Malt	1 kg (2.9%)	78 %	20
Grain	Melanoiden Malt	0.2 kg (0.6%)	80 %	39
Grain	Biscuit Malt	2 kg (5.7%)	79 %	45
Grain	Weyermann - Acidulated Malt	0.1 kg (0.3%)	80 %	6
Grain	Special B Malt	1 kg (2.9%)	65.2 %	315
Grain	BESTMALZ - Best Pilsen	13 kg (37.2%)	80.5 %	4
Grain	Briess - Chocolate Malt	0.1 kg (0.3%)	60 %	690
Sugar	Candi Sugar, Dark	0.5 kg (1.4%)	78.3 %	542
Grain	Black Barley (Roast Barley)	4 kg (11.5%)	55 %	985
Sugar	Candi Sugar, Clear	1 kg (2.9%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	40 g	60 min	11 %
Boil	Perle	100 g	60 min	7 %
Boil	Saaz (Czech Republic)	100 g	10 min	4.5 %
Boil	Hallertau Mittelfruh	100 g	10 min	3 %
Boil	East Kent Goldings	80 g	60 min	5.1 %