

Nie wiem czy stout czy Brown porter

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **23**
- SRM **26.9**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **44 liter(s)**
- Trub loss **5 %**
- Size with trub loss **46.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **55.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **29.7 liter(s)** of **76C** water or to achieve **55.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (28.2%)	80 %	7
Grain	Monachijski	4 kg (28.2%)	80 %	16
Grain	Strzegom Wiedeński	2 kg (14.1%)	79 %	10
Grain	Słód Caramunich Typ II Weyermann	1 kg (7%)	73 %	120
Grain	Caraaroma	0.5 kg (3.5%)	78 %	400
Grain	Caraamber	0.5 kg (3.5%)	75 %	59
Grain	Strzegom Czekoladowy ciemny	0.5 kg (3.5%)	68 %	1200
Sugar	Muscovado ciemny	0.6 kg (4.2%)	100 %	22
Grain	Płatki owsiane	0.5 kg (3.5%)	60 %	3
Sugar	Cukier	0.6 kg (4.2%)	100 %	1

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	60 min	6 %
Boil	Tradition	50 g	8 min	6 %
Whirlpool	Tradition	50 g	30 min	6 %

Boil	Saaz (Czech Republic)	20 g	8 min	4 %
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Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Slant	400 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	60 min