

## budżetowy stout

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- Gravity **10.2 BLG**
- ABV ---
- IBU **40**
- SRM **40**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.5 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **8.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	1 kg (34.7%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.15 kg (5.2%)	68 %	1200
Grain	Weyermann - Carafa II	0.23 kg (8%)	70 %	837
Grain	Viking Pale Ale malt	1.5 kg (52.1%)	80 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	2 g	5 min	6 %
Boil	centennial	10 g	60 min	9 %
Boil	calypso	5 g	40 min	13 %
Boil	Perle	12 g	60 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
m36	Ale	Slant	150 ml	---