

## stout bazowy

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **35**
- SRM **38**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **70 C**, Time **30 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **70C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.6 kg (35.6%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (22.2%)	80 %	4
Grain	Viking Vienna Malt	1 kg (22.2%)	79 %	7
Grain	Fawcett - Pszenciczny Czekoladowy	0.2 kg (4.4%)	73 %	1001
Grain	Weyermann - Carafa III	0.2 kg (4.4%)	70 %	1024
Grain	Wheat, Torrified	0.2 kg (4.4%)	79 %	4
Grain	Carafa III	0.3 kg (6.7%)	70 %	1034

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.5 %
Boil	Saaz (Czech Republic)	20 g	30 min	4.5 %
Boil	Styrian Golding	20 g	10 min	3.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	100 ml	Fermentum Mobile
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## Notes

- start drożdży do RISA  
*Mar 21, 2018, 10:15 AM*