

## stout g

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **32**
- SRM **34.6**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **10 %**
- Size with trub loss **38.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **50.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **37.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **29.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **29.6 liter(s)** of **76C** water or to achieve **50.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7 kg (84.3%)	80 %	4
Grain	Strzegom Karmel 600	0.3 kg (3.6%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.5 kg (6%)	68 %	1202
Grain	Jęczmień palony	0.5 kg (6%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	13 %
Boil	Willamette	50 g	15 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
fm13	Ale	Liquid	30 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
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Flavor	świeżo mielona kawa ziarnista Buon Giorno Oro	130 g	Boil	1 min
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