

## Extra Stout

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **31**
- SRM **32.9**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.6 liter(s)**
- Total mash volume **32.9 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **25.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (68.5%)	80 %	4
Grain	Abbey Malt Weyermann	0.5 kg (6.8%)	75 %	45
Grain	Czekoladowy	0.7 kg (9.6%)	60 %	1100
Grain	Płatki owsiane	0.4 kg (5.5%)	60 %	3
Grain	Strzegom Monachijski typ I	0.7 kg (9.6%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	5.7 %
Boil	Willamette	30 g	15 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	80 ml	Fermentum Mobile