

## ESB #1

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **31**
- SRM **16**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

### Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **76C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	5
Grain	Caramel/Crystal Malt - 120L	1 kg (18.2%)	72 %	160
Grain	Fawcett - Pale Crystal	0.5 kg (9.1%)	72.8 %	90

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	20 g	60 min	10.5 %
Boil	Challenger	15 g	15 min	7 %
Boil	Northdown	15 g	5 min	8.2 %
Dry Hop	Kent Goldings	25 g	7 day(s)	5.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar