

## 65 Extra Special Bitter (ESB)

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **51**
- SRM **10.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.9 liter(s)**

### Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

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

### Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **12.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.1 kg (70%)	81 %	6
Grain	Monachijski	0.45 kg (15%)	80 %	16
Grain	Caraamber	0.3 kg (10%)	75 %	59
Grain	Fawcett - Crystal	0.15 kg (5%)	70 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.3 %
Boil	East Kent Goldings	20 g	15 min	5.1 %
Boil	East Kent Goldings	20 g	10 min	5.1 %
Boil	East Kent Goldings	20 g	5 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Slant	120 ml	Wyeast Labs