

# ESB

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **38**
- SRM **13.9**
- 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 **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **20 %/h**
- Boil size **31.2 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.28 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **66 C**, Time **90 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **23 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **5 min** at **77C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **31.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	6.5 kg (92.9%)	80 %	6
Grain	Simpsons - DRC® Double Roasted Crystal	0.5 kg (7.1%)	70 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	35 g	90 min	5.8 %
Boil	East Kent Goldings	35 g	30 min	5.8 %
Aroma (end of boil)	East Kent Goldings	30 g	5 min	5.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Kveik	Ale	Slant	5 ml	House culture

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	1 g	Boil	10 min