

# ESB

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **40**
- SRM **12**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **15 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

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

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (80%)	79 %	6
Grain	Strzegom Karmel 150	0.8 kg (16%)	75 %	150
Grain	Biscuit Malt	0.2 kg (4%)	79 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	25 g	60 min	10 %
Boil	Marynka	15 g	20 min	10 %
Boil	Marynka	15 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis