

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 |