

Extra Special Bitter

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **46**
- SRM **17.6**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 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 **75 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2 kg (40%)	81 %	6
Grain	Weyermann - Vienna Malt	1 kg (20%)	81 %	8
Grain	Weyermann - Caraamber	1 kg (20%)	75 %	65
Grain	Viking cookie	0.5 kg (10%)	75 %	50
Grain	Fawcett - Dark Crystal	0.5 kg (10%)	71 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	30 g	60 min	11 %
Boil	East Kent Goldings	30 g	15 min	5.1 %
Aroma (end of boil)	East Kent Goldings	30 g	5 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis