

Extra Bitter #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **44**
- SRM **13.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (83.3%)	82 %	4
Grain	Carahell	0.5 kg (8.3%)	77 %	26
Grain	Weyermann Specjal W	0.5 kg (8.3%)	68 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	11.7 %
Boil	Marynka	15 g	60 min	8.2 %
Whirlpool	Fuggles	90 g	0 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis