Tire-Bitter

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **32**
- SRM **7.3**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **29.2 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **29.6 liter(s)**
- Total mash volume **34.5 liter(s)**

Steps

- Temp **20 C**, Time **0 min**
- Temp **65 C**, Time **90 min**
- Temp **71.5 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **29.6 liter(s)** of strike water to **20C**
- Add grains
- Keep mash **0 min** at **20C**
- Keep mash **90 min** at **65C**
- Keep mash **10 min** at **71.5C**
- Keep mash **10 min** at **77C**
- Sparge using **4.5 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	4.6 kg *(93.3%)*	81 %	6
Grain	Biscuit Malt	0.15 kg *(3%)*	79 %	50
Grain	Aromatic Malt	0.15 kg *(3%)*	78 %	51
Grain	Weyermann - Dehusked Carafa III	0.03 kg *(0.6%)*	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Sybilla	12 g	80 min	7 %
Boil	Fuggles	15 g	60 min	5.9 %
Boil	Fuggles	15 g	30 min	5.6 %
Boil	East Kent Goldings	15 g	15 min	5.4 %
Aroma (end of boil)	East Kent Goldings	15 g	5 min	5.4 %

Yeasts

Name	Type	Form	Amount	Laboratory

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

FM10 O czym szumią wierzby	Ale	Liquid	100 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	3 g	Boil	20 min