ordinary bitter

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **27**
- SRM **7**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg *(75%)*	80 %	5
Grain	Biscuit Malt	0.5 kg *(12.5%)*	79 %	45
Grain	Karmelowy Czerwony	0.5 kg *(12.5%)*	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	10 g	60 min	5.9 %
Boil	East Kent Goldings	10 g	60 min	5.4 %
Aroma (end of boil)	Fuggles	20 g	15 min	5.9 %
Aroma (end of boil)	East Kent Goldings	20 g	15 min	5.4 %
Dry Hop	Fuggles	20 g	7 day(s)	5.9 %
Dry Hop	East Kent Goldings	20 g	7 day(s)	5.4 %

Yeasts

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

Extras

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

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min