pale ale 12° blg

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **4.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	4.6 kg *(93.9%)*	80 %	4
Grain	carahell	0.3 kg *(6.1%)*	--- %	25

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	30 g	60 min	5.5 %
Aroma (end of boil)	Fuggles	20 g	15 min	4.5 %
Aroma (end of boil)	Fuggles	10 g	5 min	4.5 %

Yeasts

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

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