Edmund Bitter (Special Bitter)

- Gravity **10.5 BLG**
- ABV **---**
- IBU **34**
- SRM **9.8**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.7 liter(s)**

Steps

- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **50 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **9.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.7 kg *(65.4%)*	80 %	6
Grain	Karmelowy Jasny 30EBC	0.4 kg *(15.4%)*	75 %	30
Grain	Strzegom Karmel 150	0.3 kg *(11.5%)*	75 %	150
Grain	Weyermann - Pale Wheat Malt	0.2 kg *(7.7%)*	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	10 g	60 min	14.3 %
Boil	East Kent Goldings	10 g	20 min	5.1 %
Boil	East Kent Goldings	15 g	1 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 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	4 g	Boil	15 min
Water Agent	Gips Piwowarski	3 g	Mash	60 min