# **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**

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.7 kg <i>(65.4%)</i>	80 %	6
Grain	Karmelowy Jasny 30EBC	0.4 kg <i>(15.4%)</i>	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	Туре	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Safale

#### **Extras**

Туре	Name	Amount	Use for	Time
Fining	mech irlandzki	4 g	Boil	15 min
Water Agent	Gips Piwowarski	3 g	Mash	60 min