

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

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