

Bitter // XNKF876

- Gravity **11.4 BLG**
- ABV ---
- IBU **32**
- SRM **7.3**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 4 kg (94.1%) | 80 % | 8 |
| Grain | Fawcett - Crystal | 0.25 kg (5.9%) | 70 % | 160 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Challenger | 35 g | 75 min | 7 % |
| Aroma (end of boil) | Challenger | 15 g | 10 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|--------|------------------|
| FM10 O czym szumią wierzby | Ale | Liquid | 800 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g | Boil | 15 min |