

# bitter

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **32**
- SRM **11.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 liter(s)**

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter         | 3 kg (91.5%)   | 81 %  | 6   |
| Grain | Simpsons - Crystal Medium      | 0.25 kg (7.6%) | 74 %  | 168 |
| Grain | Weyermann - Dehusked Carafa II | 0.03 kg (0.9%) | 70 %  | 837 |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 30 g   | 30 min | 7 %        |
| Boil    | Challenger | 20 g   | 5 min  | 7 %        |

## Yeasts

| Name                  | Type | Form   | Amount | Laboratory       |
|-----------------------|------|--------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale  | Liquid | 50 ml  | Fermentum Mobile |