

# Biterek

- Gravity **13.3 BLG**
- ABV ---
- IBU **56**
- SRM **11.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **26.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **21.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 2.1 kg (39.6%) | 81 %  | 6   |
| Grain | Viking Wheat Malt      | 0.5 kg (9.4%)  | 83 %  | 5   |
| Grain | Strzegom Karmel 150    | 0.7 kg (13.2%) | 75 %  | 150 |
| Grain | Viking Pale Ale malt   | 2 kg (37.7%)   | 80 %  | 5   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Magnat            | 60 g   | 60 min | 7 %        |
| Boil    | Sybilla           | 30 g   | 15 min | 3.5 %      |
| Boil    | Lublin (Lubelski) | 30 g   | 15 min | 3.5 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 11.5 g | Danstar    |