

# Extra Special Bitter

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **37**
- SRM **15.3**
- 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 **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount       | Yield | EBC |
|-------|-------------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale Malt          | 4 kg (66.7%) | 80 %  | 5   |
| Grain | Strzegom Red Ale              | 1 kg (16.7%) | 80 %  | 60  |
| Grain | Karmelowy Pszeniczny Strzegom | 1 kg (16.7%) | 79 %  | 130 |

## Hops

| Use for   | Name               | Amount | Time   | Alpha acid |
|-----------|--------------------|--------|--------|------------|
| Boil      | East Kent Goldings | 40 g   | 60 min | 5.1 %      |
| Boil      | East Kent Goldings | 20 g   | 30 min | 5.1 %      |
| Boil      | East Kent Goldings | 10 g   | 10 min | 5.1 %      |
| Whirlpool | East Kent Goldings | 30 g   | 40 min | 5.1 %      |

## Yeasts

| Name   | Type | Form | Amount | Laboratory |
|--|------|------|--------|------------|
| Gozdawa Original British Ale Yeast Withbread OBAY 04 | Ale  | Dry  | 11.5 g | Gozdawa    |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 10 min |
|--------|----------------|-----|------|--------|