

## [3] Bitwa o Anglię II

- Gravity **12.3 BLG**
- ABV ---
- IBU **29**
- SRM **6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **67.5 C**, Time **60 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **67.5C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount        | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4.75 kg (95%) | 85 %  | 7   |
| Grain | Carahell                  | 0.25 kg (5%)  | 77 %  | 26  |

### Hops

| Use for             | Name          | Amount | Time     | Alpha acid |
|---------------------|---------------|--------|----------|------------|
| Boil                | Kent Goldings | 38 g   | 60 min   | 5.5 %      |
| Aroma (end of boil) | Sovereign     | 25 g   | 15 min   | 6.1 %      |
| Aroma (end of boil) | Sovereign     | 13 g   | 5 min    | 6.1 %      |
| Whirlpool           | Marynka       | 25 g   | 60 min   | 10 %       |
| Dry Hop             | Citra         | 30 g   | 5 day(s) | 12 %       |
| Dry Hop             | Cascade       | 14 g   | 3 day(s) | 6 %        |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

### Notes

- whirlpool 75-70C  
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