

## BelgianRED\_wel

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **17**
- SRM **3.7**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **3 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **71.6C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount          | Yield | EBC |
|-------|-------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.75 kg (62.5%) | 79 %  | 6   |
| Grain | Pilzneński        | 1 kg (16.7%)    | 81 %  | 4   |
| Grain | melanoidynowy 80  | 0.25 kg (4.2%)  | --- % | --- |
| Grain | melanoidynowy 40  | 1 kg (16.7%)    | --- % | --- |

### Hops

| Use for                                                                         | Name                  | Amount | Time   | Alpha acid |
|---------------------------------------------------------------------------------|-----------------------|--------|--------|------------|
| Boil                                                                            | Saaz (Czech Republic) | 8 g    | 70 min | 4.5 %      |
| Boil                                                                            | Challenger            | 5 g    | 70 min | 7 %        |
| Boil                                                                            | Brewers Gold          | 5 g    | 70 min | 7.6 %      |
| Boil                                                                            | Golding               | 5 g    | 70 min | 5 %        |
| wrzucone po 10min gotowania :saaz(8) ,challenger(5), brewers gold(5),golding(5) |                       |        |        |            |
| Aroma (end of boil)                                                             | Saaz (Czech Republic) | 7 g    | 10 min | 4.5 %      |
| Aroma (end of boil)                                                             | Challenger            | 5 g    | 10 min | 7 %        |
| Aroma (end of boil)                                                             | Brewers Gold          | 5 g    | 10 min | 7.6 %      |
| Aroma (end of boil)                                                             | Golding               | 5 g    | 10 min | 5 %        |

**Yeasts**

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |