

## Belgian I.P.A. 15

- Gravity **14.3 BLG**
- ABV ---
- IBU **61**
- SRM **6.5**
- Style **Belgian IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale            | 2.5 kg (47.6%) | 79 %  | 6   |
| Grain | Strzegom Pilzneński          | 2.4 kg (45.7%) | 80 %  | 4   |
| Grain | Cara Blonde - Castle Malting | 0.2 kg (3.8%)  | 78 %  | 20  |
| Grain | Biscuit Malt                 | 0.15 kg (2.9%) | 79 %  | 45  |

### Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Apollo   | 15 g   | 60 min   | 17 %       |
| Boil    | Cascade  | 15 g   | 30 min   | 6 %        |
| Boil    | Cascade  | 15 g   | 20 min   | 6 %        |
| Boil    | Amarillo | 15 g   | 20 min   | 9.5 %      |
| Boil    | Amarillo | 20 g   | 10 min   | 9.5 %      |
| Dry Hop | Amarillo | 20 g   | 7 day(s) | 9.5 %      |
| Dry Hop | Cascade  | 10 g   | 7 day(s) | 6 %        |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                                 |     |     |      |                 |
|---------------------------------|-----|-----|------|-----------------|
| Mangrove Jack's M27 Belgian Ale | Ale | Dry | 10 g | Mangrove Jack's |
|---------------------------------|-----|-----|------|-----------------|

### Extras

| Type  | Name               | Amount | Use for | Time   |
|-------|--------------------|--------|---------|--------|
| Other | cukier kandyzowany | 200 g  | Boil    | 10 min |