

# English India Pale Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **10.6**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5.5 kg (90.2%) | 85 %  | 7   |
| Grain | Weyermann - Caraamber     | 0.3 kg (4.9%)  | 75 %  | 65  |
| Grain | Karmelowy Jasny 30EBC     | 0.2 kg (3.3%)  | 75 %  | 30  |
| Grain | Strzegom Karmel 600       | 0.1 kg (1.6%)  | 68 %  | 601 |

## Hops

| Use for             | Name               | Amount | Time     | Alpha acid |
|---------------------|--------------------|--------|----------|------------|
| Boil                | Horizon            | 20 g   | 65 min   | 10 %       |
| Boil                | Marynka            | 17 g   | 65 min   | 10 %       |
| Aroma (end of boil) | Willamette         | 10 g   | 15 min   | 5 %        |
| Aroma (end of boil) | Horizon            | 10 g   | 15 min   | 10 %       |
| Aroma (end of boil) | East Kent Goldings | 20 g   | 1 min    | 5.1 %      |
| Aroma (end of boil) | Willamette         | 10 g   | 1 min    | 5 %        |
| Dry Hop             | East Kent Goldings | 10 g   | 3 day(s) | 5.1 %      |
| Dry Hop             | Willamette         | 10 g   | 3 day(s) | 5 %        |

## Yeasts

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