

## Rye IPA

- Gravity **13.6 BLG**
- ABV ---
- IBU **65**
- SRM **8.9**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.9 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **16.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Pilzneński                | 4 kg (73.1%)   | 81 %  | 4    |
| Grain | Żytni                     | 1 kg (18.3%)   | 85 %  | 8    |
| Grain | Viking Pale Ale malt      | 0.2 kg (3.7%)  | 80 %  | 5    |
| Grain | Karmelowy żytni Strzegom  | 0.25 kg (4.6%) | 75 %  | 150  |
| Grain | Strzegom Czekoladowy 1200 | 0.02 kg (0.4%) | 68 %  | 1202 |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Chinook  | 45 g   | 60 min   | 13 %       |
| Whirlpool | Chinook  | 40 g   | 0 min    | 13 %       |
| Whirlpool | Amarillo | 20 g   | 0 min    | 9.5 %      |
| Whirlpool | Cascade  | 20 g   | 0 min    | 6 %        |
| Dry Hop   | Amarillo | 30 g   | 4 day(s) | 9.5 %      |
| Dry Hop   | Chinook  | 30 g   | 4 day(s) | 13 %       |
| Dry Hop   | Citra    | 30 g   | 4 day(s) | 12 %       |
| Dry Hop   | Cascade  | 30 g   | 4 day(s) | 6 %        |

### Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Name                                 | Type | Form | Amount | Laboratory      |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's<br>M44 US West Coast | Ale  | Dry  | 10 g   | Mangrove Jack's |