

# Rye IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **56**
- SRM **5.3**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **16 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount        | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Pilzneński               | 3 kg (73.2%)  | 81 %  | 4   |
| Grain | Żytni                    | 1 kg (24.4%)  | 85 %  | 8   |
| Grain | Karmelowy Jasny<br>30EBC | 0.1 kg (2.4%) | 75 %  | 30  |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 10 g   | 60 min   | 15.5 %     |
| Boil                | Zeus Idaho 7           | 20 g   | 30 min   | 14 %       |
| Aroma (end of boil) | Idaho 7                | 10 g   | 0 min    | 12.7 %     |
| Whirlpool           | Idaho 7                | 10 g   | 0 min    | 12.7 %     |
| Dry Hop             | Idaho 7                | 20 g   | 3 day(s) | 12.7 %     |

## Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 30 ml  | Fermentum Mobile |