

# ŻYRAPA

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- Gravity **18 BLG**
- ABV ---
- IBU **73**
- SRM **9.3**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **73 C**, Time **10 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **73C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale    | 2 kg (50%)     | 79 %  | 6   |
| Grain | Żytni                | 1 kg (25%)     | 85 %  | 8   |
| Grain | Bestmalz Carmel Pils | 0.5 kg (12.5%) | 75 %  | 5   |
| Grain | Carahell             | 0.5 kg (12.5%) | 77 %  | 26  |

## Hops

| Use for             | Name         | Amount | Time     | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Boil                | Mosaic       | 10 g   | 60 min   | 10 %       |
| Boil                | Citra        | 15 g   | 60 min   | 12 %       |
| Boil                | Mosaic       | 5 g    | 30 min   | 10 %       |
| Boil                | Citra        | 5 g    | 30 min   | 12 %       |
| Aroma (end of boil) | Citra        | 10 g   | 10 min   | 12 %       |
| Aroma (end of boil) | Mosaic       | 10 g   | 10 min   | 10 %       |
| Dry Hop             | Citra        | 20 g   | 4 day(s) | 12 %       |
| Dry Hop             | Mosaic       | 25 g   | 4 day(s) | 10 %       |
| Dry Hop             | Pacific Jade | 20 g   | 4 day(s) | 13 %       |

## Yeasts

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

| <b>Name</b>  | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale         | Dry         | 11 g          | Fermentis         |

### **Extras**

| <b>Type</b> | <b>Name</b>     | <b>Amount</b> | <b>Use for</b> | <b>Time</b> |
|-------------|-----------------|---------------|----------------|-------------|
| Herb        | Trawa cytrynowa | 15 g          | Mash           | 10 min      |