

# Żyto IPA

- Gravity **15.9 BLG**
- ABV ---
- IBU **45**
- SRM **11.3**
- 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 **27.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale    | 3.5 kg (61.4%) | 79 %  | 6   |
| Grain | Żytni                | 1.5 kg (26.3%) | 85 %  | 8   |
| Grain | Weyermann - Carapils | 0.3 kg (5.3%)  | 78 %  | 4   |
| Grain | Strzegom Karmel 30   | 0.3 kg (5.3%)  | 75 %  | 30  |
| Grain | Caraaroma            | 0.1 kg (1.8%)  | 78 %  | 400 |

## Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Marynka    | 25 g   | 60 min   | 10 %       |
| Boil    | Equinox    | 5 g    | 15 min   | 13.1 %     |
| Boil    | Cascade    | 25 g   | 15 min   | 6 %        |
| Boil    | Equinox    | 20 g   | 5 min    | 13.1 %     |
| Boil    | Amarillo   | 10 g   | 5 min    | 9.5 %      |
| Boil    | Rakau (NZ) | 10 g   | 5 min    | 9.5 %      |
| Dry Hop | Amarillo   | 20 g   | 5 day(s) | 9.5 %      |
| Dry Hop | Rakau (NZ) | 20 g   | 5 day(s) | 9.5 %      |

## Yeasts

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

|             |     |       |        |     |
|-------------|-----|-------|--------|-----|
| Safale S-04 | Ale | Slant | 700 ml | --- |
|-------------|-----|-------|--------|-----|

### Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Water Agent | mech irlandzki | 5 g    | Boil    | 15 min |