

# Żytnia IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **65**
- SRM **5.5**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **14.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **14.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **14.2 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt  | 2.3 kg (69.7%) | 80 %  | 5   |
| Grain | Żytni                 | 0.6 kg (18.2%) | 85 %  | 8   |
| Grain | Strzegom Wiedeński    | 0.3 kg (9.1%)  | 79 %  | 10  |
| Grain | Karmelowy Jasny 30EBC | 0.1 kg (3%)    | 75 %  | 30  |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 20 g   | 60 min   | 15.5 %     |
| Aroma (end of boil) | Amarillo               | 25 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Nelson Sauvin          | 20 g   | 0 min    | 11 %       |
| Dry Hop             | Amarillo               | 25 g   | 3 day(s) | 9.5 %      |
| Dry Hop             | Nelson Sauvin          | 20 g   | 3 day(s) | 11 %       |

## Yeasts

| Name                        | Type | Form  | Amount | Laboratory       |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Slant | 200 ml | Fermentum Mobile |