

# Żytnie 2022

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **52**
- SRM **4.7**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **68 C**, Time **45 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **45 min** at **68C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount     | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (60%) | 80 %  | 5   |
| Grain | Żytni                | 2 kg (40%) | 85 %  | 8   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | lunga   | 40 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Chinook | 20 g   | 5 min    | 13 %       |
| Dry Hop             | Chinook | 80 g   | 3 day(s) | 13 %       |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale  | Slant | 150 ml | fermentis  |