

# Żytnia APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **5.1**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **37.4 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **15 min**

## Mash step by step

- Heat up **29.1 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **27.3 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Żytni                | 4 kg (48.2%)  | 85 %  | 8   |
| Grain | Malteurop MepAle (Pale Ale) | 4 kg (48.2%)  | 85 %  | 5   |
| Grain | Weyermann - Caraamber       | 0.3 kg (3.6%) | 75 %  | 65  |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Amarillo | 20 g   | 60 min   | 9.5 %      |
| Boil    | Citra    | 20 g   | 30 min   | 12 %       |
| Dry Hop | Amarillo | 80 g   | 3 day(s) | 9.5 %      |
| Dry Hop | Citra    | 80 g   | 3 day(s) | 12 %       |
| Dry Hop | Equinox  | 50 g   | 3 day(s) | 13.1 %     |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 200 ml | ---        |

## Extras

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

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 10 g   | Boil    | 10 min |