

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 **BREWNESS.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 |