

# Amerykańskie żyto

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **24**
- SRM **4.8**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **20.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.8 kg (48.3%) | 80 %  | 5   |
| Grain | Żytni                | 2.5 kg (43.1%) | 85 %  | 8   |
| Grain | Płatki pszeniczne    | 0.5 kg (8.6%)  | 85 %  | 3   |

## Hops

| Use for   | Name        | Amount | Time     | Alpha acid |
|-----------|-------------|--------|----------|------------|
| Boil      | Sorachi Ace | 15 g   | 60 min   | 10 %       |
| Boil      | Equinox     | 20 g   | 10 min   | 13.1 %     |
| Whirlpool | Citra       | 25 g   | 0 min    | 12 %       |
| Whirlpool | Simcoe      | 25 g   | 0 min    | 13.2 %     |
| Dry Hop   | Citra       | 25 g   | 3 day(s) | 12 %       |
| Dry Hop   | Simcoe      | 25 g   | 3 day(s) | 13.2 %     |

## Yeasts

| Name                  | Type | Form  | Amount | Laboratory  |
|-----------------------|------|-------|--------|-------------|
| Wyeast - American Ale | Ale  | Slant | 200 ml | Wyeast Labs |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |                    |      |           |          |
|-------|--------------------|------|-----------|----------|
| Spice | liść limonki kafir | 15 g | Secondary | 3 day(s) |
|-------|--------------------|------|-----------|----------|