

# Polskie żyto

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **33**
- SRM **3.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.9 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **13.9 liter(s)**

## Steps

- Temp **69 C**, Time **70 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **69C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **17.9 liter(s)** of wort

## Fermentables

| Type  | Name        | Amount         | Yield | EBC |
|-------|-------------|----------------|-------|-----|
| Grain | Pilznieński | 2.8 kg (90.9%) | 81 %  | 4   |
| Grain | Żytni       | 0.28 kg (9.1%) | 85 %  | 8   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Oktawia | 60 g   | 3 min  | 7.1 %      |
| Boil    | lunga   | 9 g    | 50 min | 11 %       |
| Boil    | lunga   | 10 g   | 10 min | 11 %       |