

# Pipa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **47**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **50 min**
- Evaporation rate **10 %/h**
- Boil size **20.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **20.4 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3.8 kg (82.6%) | 81 %  | 5   |
| Grain | Pszeniczny               | 0.5 kg (10.9%) | 85 %  | 4   |
| Grain | Weyermann - Carapils     | 0.2 kg (4.3%)  | 78 %  | 4   |
| Grain | Płatki owsiane           | 0.1 kg (2.2%)  | 60 %  | 3   |

## Hops

| Use for   | Name           | Amount | Time   | Alpha acid |
|-----------|----------------|--------|--------|------------|
| Boil      | Izabella       | 50 g   | 40 min | 6.8 %      |
| Boil      | Rody Hodowlane | 25 g   | 5 min  | 9.3 %      |
| Whirlpool | Rody Hodowlane | 25 g   | 0 min  | 9.3 %      |
| Whirlpool | Książęcy       | 100 g  | 0 min  | 8.3 %      |

## Yeasts

| Name           | Type | Form | Amount | Laboratory |
|----------------|------|------|--------|------------|
| saflager us 05 | Ale  | Dry  | 23 g   | ---        |