

# Pils włoski Italia

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **20**
- SRM **3.6**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **20.5 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.56 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **67.9C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński                  | 4.5 kg (89.1%) | 81 %  | 4   |
| Grain | Pszeniczny                  | 0.2 kg (4%)    | 85 %  | 4   |
| Grain | Weyermann - Carapils        | 0.25 kg (5%)   | 78 %  | 4   |
| Grain | Weyermann - Acidulated Malt | 0.1 kg (2%)    | 80 %  | 6   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Puławski               | 30 g   | 70 min   | 4.3 %      |
| Aroma (end of boil) | Sybilla                | 20 g   | 15 min   | 3.5 %      |
| Aroma (end of boil) | Hallertau Spalt Select | 10 g   | 15 min   | 3.4 %      |
| Aroma (end of boil) | Hallertau Spalt Select | 30 g   | 0 min    | 3.4 %      |
| Dry Hop             | Hallertau Spalt Select | 50 g   | 2 day(s) | 3.4 %      |

## Yeasts

| <b>Name</b> | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale         | Dry         | 11 g          | Fermentis         |