

# ŻLAPA

- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **23**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **73 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **12.4 liter(s)** of strike water to **80.6C**
- Add grains
- Keep mash **60 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount         | Yield  | EBC |
|-------|-------------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen        | 1 kg (28.2%)   | 80.5 % | 4   |
| Grain | Żytni                         | 1 kg (28.2%)   | 85 %   | 8   |
| Grain | monachijski Typ I Viking Malt | 1 kg (28.2%)   | 78 %   | 18  |
| Grain | Słód Carahell (R)             | 0.35 kg (9.9%) | 75 %   | 25  |
| Grain | Płatki owsiane                | 0.2 kg (5.6%)  | 85 %   | 3   |

## Hops

| Use for    | Name       | Amount | Time     | Alpha acid |
|------------|------------|--------|----------|------------|
| First Wort | lunga      | 10 g   | 60 min   | 9.5 %      |
| Boil       | Chinook PL | 25 g   | 5 min    | 8.6 %      |
| Boil       | Cascade PL | 25 g   | 5 min    | 5.5 %      |
| Boil       | Citra      | 20 g   | 5 min    | 12 %       |
| Whirlpool  | Chinook PL | 25 g   | 0 min    | 8.6 %      |
| Whirlpool  | Cascade PL | 25 g   | 0 min    | 5.5 %      |
| Whirlpool  | Citra      | 25 g   | 0 min    | 12 %       |
| Dry Hop    | Chinook PL | 25 g   | 4 day(s) | 8.6 %      |
| Dry Hop    | Cascade PL | 25 g   | 4 day(s) | 5.5 %      |

|         |       |      |          |      |
|---------|-------|------|----------|------|
| Dry Hop | Citra | 30 g | 4 day(s) | 12 % |
|---------|-------|------|----------|------|

### Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 100 ml | Fermentum Mobile |

### Extras

| Type   | Name        | Amount | Use for | Time   |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 1 g    | Boil    | 10 min |