

# ŽIPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **81**
- SRM **9.3**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **45.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **41.4 liter(s)**
- Total mash volume **53.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **41.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **45.4 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt           | 8 kg (67.6%)   | 80 %  | 5    |
| Grain | Žytni                          | 3.5 kg (29.6%) | 85 %  | 8    |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.08 kg (0.7%) | 68 %  | 1200 |
| Grain | Strzegom Karmel 30             | 0.25 kg (2.1%) | 75 %  | 30   |

## Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Iunga    | 80 g   | 60 min | 11 %       |
| Boil      | Cascade  | 30 g   | 20 min | 6 %        |
| Boil      | Amarillo | 30 g   | 15 min | 9.5 %      |
| Boil      | Citra    | 30 g   | 10 min | 12 %       |
| Whirlpool | Sabro    | 30 g   | 25 min | 15 %       |
| Whirlpool | Citra    | 30 g   | 25 min | 12 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                             |     |       |        |                  |
|-----------------------------|-----|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 180 ml | Fermentum Mobile |
| FM52 Amerykański Sen        | Ale | Slant | 250 ml | Fermentum Mobile |