

# Letnia\_HAZY\_IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **66**
- SRM **4.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount        | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | Jęczmień niesłodowany | 3 kg (40%)    | 75 %  | 2   |
| Grain | Viking Pale Ale malt  | 3 kg (40%)    | 80 %  | 5   |
| Grain | Monachijski           | 1 kg (13.3%)  | 80 %  | 16  |
| Sugar | cukier                | 0 kg          | --- % | --- |
| Grain | Płatki owsiane        | 0.5 kg (6.7%) | 60 %  | 3   |

## Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | Marynka | 40 g   | 30 min   | 7.8 %      |
| Boil      | Citra   | 10 g   | 10 min   | 13.8 %     |
| Boil      | Mosaic  | 10 g   | 10 min   | 12.2 %     |
| Boil      | Galaxy  | 10 g   | 10 min   | 15.9 %     |
| Whirlpool | Citra   | 25 g   | 30 min   | 13.8 %     |
| Whirlpool | Mosaic  | 25 g   | 30 min   | 12.2 %     |
| Whirlpool | Galaxy  | 25 g   | 30 min   | 15.9 %     |
| Dry Hop   | Citra   | 35 g   | 7 day(s) | 12 %       |

|         |        |       |          |      |
|---------|--------|-------|----------|------|
| Dry Hop | Mosaic | 35 g  | 7 day(s) | 10 % |
| Dry Hop | Galaxy | 35 g  | 7 day(s) | 15 % |
| Dry Hop | Citra  | 100 g | 5 day(s) | 12 % |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 300 ml | Fermentis  |