

# Letnie lizaki

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **50**
- SRM **4.6**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **11.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield  | EBC |
|-------|-------------------|----------------|--------|-----|
| Grain | Strzegom Pale Ale | 3 kg (76.9%)   | 79 %   | 6   |
| Grain | Pszeniczny        | 0.5 kg (12.8%) | 85 %   | 4   |
| Grain | płatki ryżowe     | 0.4 kg (10.3%) | 78.3 % | 2   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Oktawia                | 15 g   | 60 min   | 7.1 %      |
| Aroma (end of boil) | Galaxy                 | 15 g   | 10 min   | 15 %       |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 15 g   | 10 min   | 15.5 %     |
| Aroma (end of boil) | Citra                  | 15 g   | 10 min   | 12 %       |
| Dry Hop             | Galaxy                 | 15 g   | 3 day(s) | 15 %       |
| Dry Hop             | Columbus/Tomahawk/Zeus | 15 g   | 3 day(s) | 15.5 %     |
| Dry Hop             | Citra                  | 15 g   | 3 day(s) | 12 %       |

## Yeasts

| Name | Type  | Form  | Amount | Laboratory |
|------|-------|-------|--------|------------|
| s-33 | Wheat | Slant | 150 ml | fermentis  |