

# Summer ale z szyszkami sosny

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **109**
- SRM **4**
- 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 **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **80 C**, Time **3 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **3 min** at **80C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt  | 5 kg (76.9%)   | 82 %  | 4   |
| Grain | Weyermann - Carapils | 0.7 kg (10.8%) | 78 %  | 4   |
| Grain | Płatki owsiane       | 0.3 kg (4.6%)  | 60 %  | 3   |
| Grain | Pszeniczny           | 0.5 kg (7.7%)  | 85 %  | 4   |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Chinook    | 65 g   | 40 min   | 10 %       |
| Whirlpool | Mosaic     | 40 g   | 60 min   | 10 %       |
| Whirlpool | Chinook    | 10 g   | 60 min   | 13 %       |
| Whirlpool | Citra      | 50 g   | 60 min   | 12 %       |
| Dry Hop   | Cascade PL | 50 g   | 7 day(s) | 5.2 %      |
| Dry Hop   | Mosaic     | 30 g   | 7 day(s) | 10 %       |
| Dry Hop   | Citra      | 30 g   | 7 day(s) | 12 %       |

## Yeasts

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

|                                    |     |     |      |           |
|------------------------------------|-----|-----|------|-----------|
| Lallemand - LalBrew<br>Verdant IPA | Ale | Dry | 11 g | Lallemand |
|------------------------------------|-----|-----|------|-----------|

### Extras

| Type   | Name                                               | Amount | Use for | Time  |
|--------|----------------------------------------------------|--------|---------|-------|
| Flavor | Szyszki i pędy sosny<br>z syropu do<br>wysładzania | 500 g  | Boil    | 5 min |