

# Lopar

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **11**
- SRM **4.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński        | 3 kg (54.5%)   | 81 %  | 4   |
| Grain | Strzegom Pale Ale | 2.5 kg (45.5%) | 79 %  | 6   |

## Hops

| Use for             | Name         | Amount | Time     | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Boil                | Iunga        | 10 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Cascade      | 40 g   | 0 min    | 6 %        |
| Aroma (end of boil) | Enigma (AUS) | 10 g   | 0 min    | 17.2 %     |
| Aroma (end of boil) | Citra        | 20 g   | 0 min    | 12 %       |
| Aroma (end of boil) | Mosaic       | 20 g   | 0 min    | 10 %       |
| Dry Hop             | Mosaic       | 30 g   | 2 day(s) | 10 %       |
| Dry Hop             | Citra        | 30 g   | 2 day(s) | 12 %       |

## Yeasts

| Name                     | Type | Form   | Amount | Laboratory  |
|--------------------------|------|--------|--------|-------------|
| Wyeast - American Ale II | Ale  | Liquid | 200 ml | Wyeast Labs |