

## Polish IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **73**
- SRM **4.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **20.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt  | 4.2 kg (86.6%) | 80 %  | 5   |
| Grain | Pszeniczny            | 0.4 kg (8.2%)  | 85 %  | 4   |
| Grain | Karmelowy Jasny 30EBC | 0.25 kg (5.2%) | 75 %  | 30  |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | lunga    | 25 g   | 60 min   | 11 %       |
| Aroma (end of boil) | puławski | 30 g   | 15 min   | 6 %        |
| Aroma (end of boil) | Cascade  | 50 g   | 10 min   | 6 %        |
| Aroma (end of boil) | Oktawia  | 30 g   | 10 min   | 7.1 %      |
| Aroma (end of boil) | Marynka  | 30 g   | 10 min   | 10 %       |
| Dry Hop             | Cascade  | 50 g   | 7 day(s) | 6 %        |
| Dry Hop             | Chinook  | 30 g   | 7 day(s) | 13 %       |
| Dry Hop             | Marynka  | 30 g   | 7 day(s) | 10 %       |

### Yeasts

| Name               | Type | Form  | Amount | Laboratory |
|--------------------|------|-------|--------|------------|
| Mauribrew Ale Y514 | Ale  | Slant | 200 ml | Mauribrew  |