

# Made in Poland IPA by TwójBrowar.pl

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **57**
- SRM **4.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.9 liter(s)**

## Steps

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

## Mash step by step

- Heat up **15 liter(s)** of strike water to **74.6C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.3 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<br>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   | 4.3 %      |
| Aroma (end of boil) | Cascade PL | 50 g   | 10 min   | 5.2 %      |
| Aroma (end of boil) | Oktawia    | 30 g   | 10 min   | 7.1 %      |
| Dry Hop             | Cascade PL | 50 g   | 6 day(s) | 5.2 %      |
| Dry Hop             | Chinook    | 30 g   | 6 day(s) | 13 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |