

# Ne

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **36**
- SRM **3.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.37 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **27.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale    | 3 kg (67.4%)   | 79 %  | 6   |
| Grain | Bestmalz Carmel Pils | 0.25 kg (5.6%) | 75 %  | 5   |
| Grain | Płatki owsiane       | 1.2 kg (27%)   | 85 %  | 3   |

## Hops

| Use for | Name   | Amount | Time     | Alpha acid |
|---------|--------|--------|----------|------------|
| Boil    | Apollo | 10 g   | 60 min   | 18.7 %     |
| Boil    | Citra  | 10 g   | 60 min   | 13.7 %     |
| Boil    | Apollo | 15 g   | 0 min    | 18.7 %     |
| Boil    | Citra  | 15 g   | 0 min    | 13.7 %     |
| Dry Hop | Apollo | 25 g   | 7 day(s) | 18.7 %     |
| Dry Hop | Citra  | 25 g   | 7 day(s) | 13.7 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |