

# WŁASNY ŚRUT\_ALE II

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **32**
- SRM **3.6**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 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 **62 C**, Time **20 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (54.5%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 0.5 kg (9.1%) | 85 %  | 4   |
| Grain | Viking Pilsner malt  | 2 kg (36.4%)  | 82 %  | 4   |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Magnum     | 15 g   | 60 min   | 12 %       |
| Boil      | Magnum     | 0 g    | 30 min   | 12 %       |
| Boil      | Cascade    | 10 g   | 20 min   | 7.6 %      |
| Boil      | Centennial | 10 g   | 10 min   | 8.5 %      |
| Boil      | Cascade    | 10 g   | 10 min   | 7.6 %      |
| Boil      | Centennial | 20 g   | 5 min    | 8.5 %      |
| Boil      | Cascade    | 20 g   | 5 min    | 7.6 %      |
| Boil      | Centennial | 15 g   | 0 min    | 8.5 %      |
| Boil      | Cascade    | 15 g   | 0 min    | 7.6 %      |
| Whirlpool | Centennial | 10 g   | -3 min   | 8.5 %      |
| Dry Hop   | Cascade    | 40 g   | 4 day(s) | 7.6 %      |
| Dry Hop   | Centennial | 30 g   | 4 day(s) | 8.5 %      |

## Yeasts

| Name       | Type | Form  | Amount | Laboratory |
|------------|------|-------|--------|------------|
| jakieś FMy | Ale  | Slant | 100 ml | nie wiem   |