

# Niskoalkoholowe

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- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **49**
- SRM **3.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale    | 2 kg (50%)     | 79 %  | 6   |
| Grain | Bestmalz Carmel Pils | 0.5 kg (12.5%) | 75 %  | 5   |
| Grain | Płatki owsiane       | 1 kg (25%)     | 85 %  | 3   |
| Grain | Płatki pszeniczne    | 0.5 kg (12.5%) | 85 %  | 3   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | lunga    | 30 g   | 30 min   | 12.4 %     |
| Boil    | Amarillo | 50 g   | 10 min   | 8.8 %      |
| Boil    | Amarillo | 50 g   | 0 min    | 8.8 %      |
| Dry Hop | Citra    | 50 g   | 7 day(s) | 12 %       |

## Yeasts

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