

## Low alc ale

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- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **15**
- SRM **1.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **3.6 liter(s)**
- Total mash volume **4.8 liter(s)**

### Steps

- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **3.6 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **50 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **15.7 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt   | 0.6 kg (37.5%) | 80 %  | 3   |
| Grain | Płatki owsiane         | 0.2 kg (12.5%) | 85 %  | 3   |
| Grain | Briess - Carapils Malt | 0.2 kg (12.5%) | 74 %  | 3   |
| Grain | Żytni                  | 0.2 kg (12.5%) | 85 %  | 8   |
| Sugar | Corn Sugar (Dextrose)  | 0.4 kg (25%)   | 100 % | 0   |

### Hops

| Use for             | Name   | Amount | Time   | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil                | Mosaic | 5 g    | 30 min | 10 %       |
| Aroma (end of boil) | Mosaic | 25 g   | 1 min  | 10 %       |
| Boil                | Mosaic | 25 g   | 2 min  | 10 %       |

### Yeasts

| Name   | Type | Form  | Amount | Laboratory      |
|--------|------|-------|--------|-----------------|
| WLP644 | Ale  | Slant | 40 ml  | Mangrove Jack's |