

## Pale Ale v3

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **13**
- SRM **4.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **18.5 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.2 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount       | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (46.5%) | 80 %  | 5   |
| Grain | Pilznieński          | 2 kg (46.5%) | 81 %  | 4   |
| Grain | Strzegom Pszeniczny  | 0.3 kg (7%)  | 81 %  | 6   |

### Hops

| Use for   | Name              | Amount | Time     | Alpha acid |
|-----------|-------------------|--------|----------|------------|
| Boil      | Simcoe            | 7 g    | 60 min   | 13.2 %     |
| Whirlpool | Lublin (Lubelski) | 5 g    | 10 min   | 4 %        |
| Dry Hop   | Lublin (Lubelski) | 15 g   | 2 day(s) | 4 %        |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |