

# Ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **33**
- SRM **4.9**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **3 %**
- Size with trub loss **42.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **47 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **27 liter(s)** of **76C** water or to achieve **47 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount     | Yield | EBC |
|-------|-----------------------------|------------|-------|-----|
| Grain | Viking Pale Ale malt        | 8 kg (80%) | 80 %  | 5   |
| Grain | Strzegom Monachijski typ II | 1 kg (10%) | 79 %  | 22  |
| Grain | Pszeniczny                  | 1 kg (10%) | 85 %  | 4   |

## Hops

| Use for             | Name                  | Amount | Time     | Alpha acid |
|---------------------|-----------------------|--------|----------|------------|
| Boil                | lunga                 | 60 g   | 60 min   | 10 %       |
| Aroma (end of boil) | Kazbek                | 50 g   | 0 min    | 4.6 %      |
| Dry Hop             | Saaz (Czech Republic) | 100 g  | 4 day(s) | 3.5 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 22 g   | Fermentis  |