

# Nie pale

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **31**
- SRM **7.1**
- 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 **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **73 C**, Time **20 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **73C**
- Sparge using **17.7 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       | 5 kg (71.4%) | 80 %  | 5   |
| Grain | Karmelowy 50 - Viking Malt | 1 kg (14.3%) | 79 %  | 50  |
| Grain | Viking Pilsner malt        | 1 kg (14.3%) | 82 %  | 4   |

## Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Aroma (end of boil) | Citra | 80 g   | 5 min  | 12 %       |
| Boil                | Citra | 20 g   | 30 min | 12 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 15 g   | Fermentis  |