

## New Zealand Pale Ale

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **44**
- SRM **6.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

### Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt     | 5.1 kg (91.1%) | 80 %  | 5   |
| Grain | Fawcett pszenica prażona | 0.3 kg (5.4%)  | 70 %  | 6   |
| Grain | Crystal Karmel 150       | 0.2 kg (3.6%)  | 75 %  | 150 |

### Hops

| Use for             | Name           | Amount | Time   | Alpha acid |
|---------------------|----------------|--------|--------|------------|
| Boil                | Green Bullet   | 20 g   | 60 min | 12.2 %     |
| Boil                | Magnum         | 5 g    | 60 min | 11.5 %     |
| Boil                | Nelson Sauvign | 20 g   | 10 min | 11 %       |
| Aroma (end of boil) | Pacifica (NZ)  | 30 g   | 5 min  | 4.8 %      |

### Yeasts

| Name                  | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Bulldog american west | Ale  | Dry  | 10 g   | ---        |