

# Nowozelandzka APA v3.0

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **42**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **20.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **24.2 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pale Malt (2 Row) Bel | 6.5 kg (94.2%) | 80 %  | 6   |
| Grain | Pszeniczny            | 0.4 kg (5.8%)  | 85 %  | 4   |

## Hops

| Use for             | Name        | Amount | Time     | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil                | Pacific Gem | 30 g   | 30 min   | 15.3 %     |
| Boil                | Wakatu      | 30 g   | 10 min   | 8.5 %      |
| Boil                | Wakatu      | 20 g   | 10 min   | 8.5 %      |
| Aroma (end of boil) | Pacific Gem | 20 g   | 0 min    | 15.3 %     |
| Whirlpool           | WAI-ITI     | 25 g   | 20 min   | 4.1 %      |
| Przy 90 stopniach.  |             |        |          |            |
| Dry Hop             | Rakau (NZ)  | 200 g  | 5 day(s) | 9.5 %      |
| Whirlpool           | WAI-ITI     | 25 g   | 10 min   | 4.1 %      |
| Przy 80 stopniach.  |             |        |          |            |

## Yeasts

| Name                              | Type | Form | Amount | Laboratory      |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale  | Dry  | 11 g   | Mangrove Jack's |

|              |     |     |      |           |
|--------------|-----|-----|------|-----------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |
|--------------|-----|-----|------|-----------|

### Extras

| Type        | Name            | Amount | Use for | Time   |
|-------------|-----------------|--------|---------|--------|
| Water Agent | Gips piwowarski | 10 g   | Mash    | 60 min |