

NewZealandHops#1

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **7.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (72.7%) | 80 % | 2 |
| Grain | Viking Vienna Malt | 0.5 kg (9.1%) | 79 % | 7 |
| Grain | Viking Karmel 150 | 0.5 kg (9.1%) | 75 % | 150 |
| Grain | Płatki owsiane błyskawiczne | 0.5 kg (9.1%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|----------|------------|
| Boil | Green Bullet NZ | 20 g | 60 min | 11.7 % |
| Aroma (end of boil) | Kohatu NZ | 30 g | 10 min | 5.8 % |
| Dry Hop | Kohatu NZ | 70 g | 4 day(s) | 5.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 500 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|-----------------|-----|------|--------|
| Water Agent | gips piwowarski | 5 g | Mash | 60 min |
|-------------|-----------------|-----|------|--------|