

# Tormodgarden low-alc APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **6.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **74 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **83C**
- Add grains
- Keep mash **60 min** at **74C**
- Keep mash **1 min** at **78C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński    | 4 kg (62%)     | 80 %   | 4   |
| Grain | Żytni                  | 1 kg (15.5%)   | 85 %   | 8   |
| Grain | Płatki owsiane         | 0.8 kg (12.4%) | 85 %   | 3   |
| Grain | Fawcett - Pale Crystal | 0.25 kg (3.9%) | 72.8 % | 90  |
| Grain | Abbey Malt Weyermann   | 0.4 kg (6.2%)  | 75 %   | 45  |

## Hops

| Use for   | Name      | Amount | Time     | Alpha acid |
|-----------|-----------|--------|----------|------------|
| Whirlpool | Citra     | 25 g   | 20 min   | 12 %       |
| Whirlpool | El Dorado | 25 g   | 20 min   | 15 %       |
| Whirlpool | Azacca    | 25 g   | 20 min   | 12 %       |
| Dry Hop   | Citra     | 75 g   | 3 day(s) | 12 %       |
| Dry Hop   | El Dorado | 75 g   | 3 day(s) | 15 %       |
| Dry Hop   | Azacca    | 75 g   | 3 day(s) | 14 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                    |     |       |       |                     |
|--------------------|-----|-------|-------|---------------------|
| Tormodgarden Kveik | Ale | Slant | 70 ml | Norwegian Farmhouse |
|--------------------|-----|-------|-------|---------------------|

### Extras

| Type        | Name                            | Amount | Use for   | Time      |
|-------------|---------------------------------|--------|-----------|-----------|
| Water Agent | Pozywka dla drozdzy             | 3 g    | Boil      | 2 min     |
| Water Agent | Skórka z pomarańczy i grejfruta | 30 g   | Secondary | 60 day(s) |