

## Single Hop Kveik APA - Książęcy.

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **27**
- SRM **3.7**
- 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

### Steps

- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **19.2 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Strzegom Pilzniejszy | 3 kg (46.9%)   | 80 %   | 4   |
| Grain | Briess - Rye Malt    | 1 kg (15.6%)   | 80 %   | 7   |
| Grain | Oats, Flaked         | 1.2 kg (18.7%) | 80 %   | 2   |
| Grain | Rye, Flaked          | 0.4 kg (6.3%)  | 78.3 % | 4   |
| Grain | Spelt, Flaked        | 0.8 kg (12.5%) | 77 %   | 4   |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Whirlpool | Książęcy | 100 g  | 20 min   | 10 %       |
| Dry Hop   | Książęcy | 200 g  | 4 day(s) | 7 %        |

### Yeasts

| Name            | Type | Form  | Amount | Laboratory          |
|-----------------|------|-------|--------|---------------------|
| Hornindal Kveik | Ale  | Slant | 40 ml  | Norwegian Farmhouse |

### Extras

| Type        | Name                | Amount | Use for | Time  |
|-------------|---------------------|--------|---------|-------|
| Water Agent | Pozywka dla drozdzy | 3 g    | Boil    | 2 min |

|             |                                |     |      |        |
|-------------|--------------------------------|-----|------|--------|
| Water Agent | Sól epsom                      | 3 g | Boil | 20 min |
| Water Agent | Kwas mlekowy do<br>wysładzania | 4 g | Mash | 60 min |