

## APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **26**
- SRM **5.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **27.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.05 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **28.7 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **23 liter(s)** of strike water to **69.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.9 kg (51%)   | 80 %  | 5   |
| Grain | Strzegom Pszeniczny  | 2 kg (35.1%)   | 81 %  | 6   |
| Grain | Płatki owsiane       | 0.6 kg (10.5%) | 85 %  | 3   |
| Grain | Cookie Vikng Malt    | 0.19 kg (3.3%) | 72 %  | 50  |

### Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | Magnum   | 25 g   | 50 min   | 10.5 %     |
| Whirlpool | Amarillo | 20 g   | 0 min    | 10.5 %     |
| Whirlpool | Cascade  | 20 g   | 0 min    | 7.2 %      |
| Dry Hop   | Amarillo | 50 g   | 3 day(s) | 10.5 %     |
| Dry Hop   | Cascade  | 50 g   | 3 day(s) | 7.2 %      |

### Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| LallBrew New England | Ale  | Dry  | 11 g   | Lallemand  |