

## a

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **4.5**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

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

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński Viking | 4.7 kg (79.7%) | 81 %  | 4   |
| Grain | Cookie Viking     | 0.2 kg (3.4%)  | 79 %  | 45  |
| Grain | Płatki żytnie     | 0.5 kg (8.5%)  | 80 %  | 4   |
| Grain | Pszeniczny        | 0.5 kg (8.5%)  | 85 %  | 4   |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Magnum   | 25 g   | 60 min | 10.5 %     |
| Boil    | Puławski | 15 g   | 10 min | 8 %        |

### Yeasts

| Name                           | Type | Form | Amount | Laboratory |
|--------------------------------|------|------|--------|------------|
| Lallemand Danstar Belle Saison | Ale  | Dry  | 11 g   | lallemand  |

### Extras

| Type  | Name            | Amount | Use for | Time  |
|-------|-----------------|--------|---------|-------|
| Spice | trawa cytrynowa | 20 g   | Boil    | 5 min |