

## #231 ctrl+O

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **3.5**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **7 %**
- Size with trub loss **30.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **33.3 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **69 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **33.3 liter(s)** of wort

### Fermentables

| Type  | Name   | Amount       | Yield | EBC |
|-------|--|--------------|-------|-----|
| Grain | Pale Ale Maris Otter Extra 2,5-3,5 EBC Crisp | 5 kg (71.4%) | 80 %  | 3   |
| Grain | Steinbach Malt pszeniczny                    | 1 kg (14.3%) | 80 %  | 4   |
| Grain | Viking Malt owsiany                          | 1 kg (14.3%) | 61 %  | 5   |

### Hops

| Use for             | Name                      | Amount | Time     | Alpha acid |
|---------------------|---------------------------|--------|----------|------------|
| Boil                | lunga PL 2022             | 34 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Mandarina Bavaria DE 2022 | 15 g   | 10 min   | 7.8 %      |
| Aroma (end of boil) | Citra US 2021             | 15 g   | 10 min   | 14.2 %     |
| Dry Hop             | Citra US 2021             | 35 g   | 7 day(s) | 14.2 %     |
| Dry Hop             | Mandarina Bavaria DE 2022 | 35 g   | 7 day(s) | 7.8 %      |
| Dry Hop             | Mosaic US 2023            | 50 g   | 7 day(s) | 12.2 %     |

### Yeasts

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

|                        |     |       |       |            |
|------------------------|-----|-------|-------|------------|
| WLP066 - London<br>Fog | Ale | Slant | 80 ml | White Labs |
|------------------------|-----|-------|-------|------------|