

## #153 ctrl+H

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **4.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **22.7 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

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

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **90 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Viking pilzneński | 2.1 kg (33.1%) | 82 %  | 4   |
| Grain | Viking pszeniczny | 2.1 kg (33.1%) | 83 %  | 5   |
| Grain | Viking owsiany    | 1 kg (15.7%)   | 61 %  | 5   |
| Grain | Viking wiedeński  | 0.4 kg (6.3%)  | 78 %  | 8   |
| Grain | Płatki owsiane    | 0.4 kg (6.3%)  | 60 %  | 3   |
| Grain | Słód enzymatyczny | 0.2 kg (3.1%)  | 80 %  | 5   |
| Grain | Płatki pszeniczne | 0.15 kg (2.4%) | 60 %  | 3   |

### Hops

| Use for             | Name           | Amount | Time     | Alpha acid |
|---------------------|----------------|--------|----------|------------|
| Boil                | Perle PL 2021  | 50 g   | 60 min   | 5.4 %      |
| Boil                | lunga PL 2021  | 10 g   | 20 min   | 12.4 %     |
| Aroma (end of boil) | Mosaic US 2021 | 10 g   | 15 min   | 11.8 %     |
| Dry Hop             | Citra US 2020  | 50 g   | 7 day(s) | 12.6 %     |
| Dry Hop             | lunga PL 2021  | 40 g   | 7 day(s) | 12.4 %     |
| Dry Hop             | Mosaic US 2021 | 40 g   | 7 day(s) | 11.8 %     |

### Yeasts

| <b>Name</b>           | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|-----------------------|-------------|-------------|---------------|-------------------|
| Lallemand Verdant IPA | Ale         | Slant       | 40 ml         | Lallemand         |