

## #23 Single Hop Session IPA Centennial

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **41**
- SRM **3.4**
- Style **American IPA**

### 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 **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.66 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.1 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **77 C**, Time **0 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **70C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **0 min** at **77C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.8 kg (92.7%) | 80 %  | 5   |
| Grain | Płatki owsiane       | 0.3 kg (7.3%)  | 60 %  | 3   |

### Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Centennial | 20 g   | 55 min   | 10.5 %     |
| Boil                | Centennial | 30 g   | 5 min    | 10.5 %     |
| Aroma (end of boil) | Centennial | 30 g   | 0 min    | 10.5 %     |
| Whirlpool           | Centennial | 30 g   | 20 min   | 10.5 %     |
| Dry Hop             | Centennial | 80 g   | 4 day(s) | 10.5 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 11.5 g | ---        |