

- Gravity **11.9 BLG**
- ABV ---
- IBU **39**
- SRM **4.1**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **17.4 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **13 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount          | Yield  | EBC |
|-------|------------------------|-----------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 3.9 kg (89.7%)  | 80.5 % | 4   |
| Grain | Bestmalz - Carapils    | 0.45 kg (10.3%) | 75 %   | 5   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Aroma (end of boil) | Jarrylo  | 30 g   | 8 min    | 13.8 %     |
| Aroma (end of boil) | Waimea   | 30 g   | 8 min    | 15.1 %     |
| Boil                | Marynka  | 5 g    | 50 min   | 10.5 %     |
| Dry Hop             | Citra    | 30 g   | 5 day(s) | 12 %       |
| Dry Hop             | Amarillo | 30 g   | 5 day(s) | 8.8 %      |
| Dry Hop             | Mosaic   | 30 g   | 5 day(s) | 11.7 %     |

### Yeasts

| Name    | Type  | Form | Amount | Laboratory         |
|---------|-------|------|--------|--------------------|
| W-34/70 | Lager | Dry  | 11.5 g | Fermentis Saflager |

### Extras

| Type   | Name     | Amount | Use for | Time   |
|--------|----------|--------|---------|--------|
| Fining | wirflock | 3 g    | Boil    | 10 min |

### Notes

- Warzone 14/11/2016  
Nov 17, 2016, 5:06 PM