

## West Coast

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **81**
- SRM **4.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **23.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Rahr - Premium Pilsner Malt  | 5.6 kg (78.9%) | 80 %  | 4   |
| Grain | Rice, Flaked                 | 1 kg (14.1%)   | 70 %  | 2   |
| Grain | Cara Blonde - Castle Malting | 0.2 kg (2.8%)  | 78 %  | 20  |
| Sugar | cukier biały                 | 0.3 kg (4.2%)  | 100 % | 2   |

### Hops

| Use for             | Name   | Amount | Time     | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil                | Magnum | 60 g   | 60 min   | 12.7 %     |
| Aroma (end of boil) | Citra  | 25 g   | 10 min   | 12.8 %     |
| Aroma (end of boil) | Galaxy | 25 g   | 10 min   | 13.6 %     |
| Aroma (end of boil) | Citra  | 25 g   | 0 min    | 12.8 %     |
| Aroma (end of boil) | Galaxy | 25 g   | 0 min    | 13.6 %     |
| Dry Hop             | Galaxy | 50 g   | 3 day(s) | 15 %       |
| Dry Hop             | Citra  | 50 g   | 3 day(s) | 12 %       |

### Yeasts

| Name                                 | Type | Form | Amount | Laboratory      |
|--------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's<br>M44 US West Coast | Ale  | Dry  | 11 g   | Mangrove Jack's |