

## West Coast Cascade

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **10 %**
- Size with trub loss **46 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **55.2 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.2 liter(s)**
- Total mash volume **41.6 liter(s)**

### Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **31.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **34.4 liter(s)** of **76C** water or to achieve **55.2 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount        | Yield  | EBC |
|-------|------------------------|---------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 10 kg (96.2%) | 80.5 % | 4   |
| Grain | Strzegom Karmel 150    | 0.4 kg (3.8%) | 75 %   | 150 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Cascade | 80 g   | 60 min | 5.9 %      |
| Boil    | Cascade | 40 g   | 30 min | 5.9 %      |
| Boil    | Cascade | 40 g   | 5 min  | 5.9 %      |

### Yeasts

| Name                              | Type | Form | Amount | Laboratory      |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale  | Dry  | 23 g   | Mangrove Jack's |