

West Coast pl 3

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **54**
- SRM **5.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **88.1 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **25.3 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.7 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|--------|-----|
| Grain | Briess - Pale Ale Malt malteurope | 5.2 kg (78%) | 80 % | 7 |
| Grain | Rye, Flaked | 0.65 kg (9.7%) | 78.3 % | 4 |
| Grain | Płatki orkiszowe | 0.4 kg (6%) | 80 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (6%) | 85 % | 3 |
| Grain | Red crystal fawcett 400 | 0.02 kg (0.3%) | 68 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | Chinook pl | 30 g | 10 min | 7.4 % |
| Boil | Crystal | 30 g | 10 min | 2.4 % |
| Boil | Cascade PL | 30 g | 10 min | 5.2 % |
| Boil | Centennial pl | 30 g | 10 min | 5.4 % |
| Boil | Chinook pl | 30 g | 30 min | 7.4 % |
| Boil | Crystal | 30 g | 30 min | 2.4 % |
| Boil | Cascade PL | 30 g | 30 min | 5.2 % |
| Boil | Centennial pl | 30 g | 30 min | 5.4 % |

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|--------------------------------------|-------------|-------------|---------------|-------------------|
| Mangrove Jack's M44 US West Coast | Ale | Slant | 200 ml | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Water Agent | Gips | 4 g | Mash | 70 min |
| Fining | Whirfloc | 1 g | Boil | 5 min |