

west coast

- Gravity **15 BLG**
- ABV ---
- IBU **100**
- SRM **3.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 1.4 kg (36.8%) | 81 % | 6 |
| Grain | Pilsner (2 Row) UK | 2 kg (52.6%) | 78 % | 2 |
| Grain | Płatki orkiszowe | 0.4 kg (10.5%) | 60 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------|--------|--------|------------|
| Boil | Mosaic | 10 g | 55 min | 11.8 % |
| Boil | Comet | 10 g | 10 min | 10.2 % |
| Boil | Amarillo | 30 g | 10 min | 9.5 % |
| Boil | El Dorado | 30 g | 5 min | 11.6 % |
| Boil | Amarillo | 5 g | 5 min | 9.5 % |
| Whirlpool | Mosaic | 30 g | 30 min | 11.8 % |
| Whirlpool | El Dorado | 30 g | 25 min | 11.6 % |
| Whirlpool | Amarillo | 20 g | 20 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------------------------------|-----|-----|------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 10 g | Mangrove Jack's |
|--------------------------------------|-----|-----|------|-----------------|

Extras

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