

## 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
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Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's
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### Extras

Type	Name	Amount	Use for	Time
Fining	tabletki	3 g	Boil	10 min