

# WEST COAST IPA v11 #81

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **62**
- SRM **4.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.5 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **75 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **45 min** at **72C**
- Keep mash **7 min** at **75C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Ale	4.8 kg (86.5%)	82.1 %	5.5
Grain	Viking - Rye malt	0.25 kg (4.5%)	81 %	8
Grain	Płatki owsiane	0.5 kg (9%)	83 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	14.7 %
Boil	Chinook PL	20 g	20 min	8.6 %
Aroma (end of boil)	Centennial	25 g	10 min	9.5 %
Aroma (end of boil)	Cascade US	20 g	10 min	6.9 %
Aroma (end of boil)	Centennial	30 g	5 min	9.5 %
Aroma (end of boil)	Cascade US	30 g	1 min	6.9 %
Dry Hop	Centennial	45 g	3 day(s)	9.5 %
Dry Hop	Cascade US	45 g	3 day(s)	6.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM54 Gorączka kalifornijska	Ale	Slant	270 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	2 g	Mash	---
Water Agent	kwas mlekowy 80% [ml]	3.25 g	Mash	---
Water Agent	chlorek wapnia [ml]	5.14 g	Mash	---
Water Agent	epsom	1.5 g	Mash	---
Water Agent	mech irlandzki	3 g	Boil	5 min