

# Sen o Kalifornii

- Gravity **12.1 BLG**
- ABV ---
- IBU **62**
- SRM **10.1**
- Style **California Common Beer**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **39.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **49.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **28.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **30.8 liter(s)** of **76C** water or to achieve **49.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (52.6%)	82 %	6
Grain	Strzegom Monachijski typ I	1 kg (10.5%)	79 %	16
Grain	Strzegom Karmel 30	1 kg (10.5%)	75 %	30
Grain	Strzegom Bursztynowy	1 kg (10.5%)	70 %	70
Grain	Strzegom Karmel 150	1 kg (10.5%)	75 %	70
Grain	Pszeniczny	0.5 kg (5.3%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %
Boil	Oktawia	50 g	20 min	7.1 %
Boil	Chinook	50 g	10 min	13 %
Boil	Oktawia	50 g	5 min	7.1 %
Boil	Chinook	50 g	0 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	50 ml	Fermentum Mobile