

## #98 Californication v.8

- Gravity **13 BLG**
- ABV ---
- IBU **38**
- SRM **7.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **39 liter(s)**
- Trub loss **10 %**
- Size with trub loss **42.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **47.2 liter(s)**

### Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **28.9 liter(s)**
- Total mash volume **36.7 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **28.9 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **26.1 liter(s)** of **76C** water or to achieve **47.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Bel	6.5 kg (83.3%)	79 %	4
Grain	Briess - Munich Malt 10L	1 kg (12.8%)	77 %	20
Grain	Strzegom Karmel 150	0.3 kg (3.8%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Columbus/Tomahawk/Zeus	40 g	60 min	13 %
Aroma (end of boil)	Chinook	20 g	10 min	13 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Aroma (end of boil)	Chinook	30 g	0 min	13 %
Aroma (end of boil)	Citra	15 g	0 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis