

West Coast high noon3PK

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **26**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner Malz Best	4 kg (93%)	81 %	3
Grain	Melanoidin BESTMALZ	0.1 kg (2.3%)	75 %	71
Grain	Carahell Best	0.1 kg (2.3%)	75 %	30
Grain	Carapils	0.1 kg (2.3%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	15.5 %
Aroma (end of boil)	Simcoe	5 g	5 min	14.5 %
Aroma (end of boil)	Citra	5 g	5 min	11.6 %
Aroma (end of boil)	Cascade	5 g	5 min	5.8 %
Whirlpool	Simcoe	10 g	20 min	14.5 %
Whirlpool	Citra	10 g	20 min	11.6 %
Whirlpool	Cascade	10 g	20 min	5.8 %
Dry Hop	Simcoe	20 g	2 day(s)	14.5 %

Dry Hop	Citra	20 g	2 day(s)	11.6 %
Dry Hop	Cascade	20 g	2 day(s)	5.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
BRY-97 American West Coast	Ale	Slant	500 ml	Danstar

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	3 g	Mash	---
Water Agent	Kwas mlekowy	2 g	Mash	---