

West Coast Black IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **69**
- SRM **31.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (85.7%)	80 %	5
Grain	Jęczmień palony	0.3 kg (4.3%)	5 %	985
Ześrutowane ziarno zalane zimną wodą na kilka godzin, do piwa dodawany jedynie płyn w celu zabarwienia brzezki.				
Sugar	cukier	0.4 kg (5.7%)	98 %	2
Grain	Carafa III	0.3 kg (4.3%)	5 %	1034
Ześrutowane ziarno zalane zimną wodą na kilka godzin, do piwa dodawany jedynie płyn w celu zabarwienia brzezki.				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zeus	30 g	60 min	15.5 %
Aroma (end of boil)	Apollo	30 g	7 min	15 %
Aroma (end of boil)	Cascade	30 g	7 min	6 %
Aroma (end of boil)	Chinook	30 g	7 min	13 %
Dry Hop	Apollo	50 g	4 day(s)	15 %
Dry Hop	Cascade	50 g	4 day(s)	6 %
Dry Hop	Chinook	50 g	4 day(s)	13 %

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	200 ml	fermentum mobile

Extras

Type	Name	Amount	Use for	Time
Fining	fhirfloc t	2.5 g	Boil	10 min
Water Agent	gips piwowarski	4 g	Mash	0 min