

West Coast Rye IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **57**
- SRM **8.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **68 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **25 min** at **68C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.4 kg (49.3%)	81 %	4
Grain	Viking Pale Ale malt	2.1 kg (30.4%)	80 %	5
Grain	Żytni	1 kg (14.5%)	85 %	8
Grain	Caramel/Crystal Malt - 10L	0.4 kg (5.8%)	75 %	160

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	25 g	60 min	12.4 %
Boil	Centennial	15 g	60 min	9.5 %
Boil	Centennial	15 g	30 min	9.5 %
Boil	Columbus/Tomahawk/Zeus	25 g	10 min	12.4 %
Dry Hop	Simcoe	50 g	5 day(s)	13.1 %
Dry Hop	Mosaic	25 g	5 day(s)	12 %
Dry Hop	Citra	25 g	5 day(s)	13.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	380 ml	Mangrove Jack's