

Pacific Red Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **44**
- SRM **13**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **9 min**
- Temp **75 C**, Time **1 min**

Mash step by step

- Heat up **18.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **9 min** at **72C**
- Keep mash **1 min** at **75C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Hook Head Irish Pale Malt 4-6 EBC (Minch)	3.5 kg (56.9%)	80 %	6
Grain	Pilsner malt Muntons	1 kg (16.3%)	82 %	3
Grain	Amber Malt MINCH Kildare	0.5 kg (8.1%)	75 %	80
Grain	Cara Ruby CHATEAU	0.5 kg (8.1%)	72 %	50
Grain	Weyermanns Roasted Rye Malt	0.15 kg (2.4%)	71 %	800
Grain	Minch Irish Grown Wheat Malt	0.5 kg (8.1%)	81 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pacific Gem (NZ) Leaf Harvest	25 g	60 min	14.5 %
Aroma (end of boil)	Mosaic Pellets Harvest	15 g	10 min	11.5 %
Aroma (end of boil)	Cascade USA Leaf Harvest	5 g	10 min	8.6 %

Aroma (end of boil)	Simcoe	10 g	5 min	13.2 %
Aroma (end of boil)	Pacific Gem (NZ) Leaf Harvest	10 g	5 min	14.5 %
Dry Hop	Simcoe	40 g	7 day(s)	13.2 %
Dry Hop	Pacific Gem (NZ) Leaf Harvest	40 g	3 day(s)	14.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP041 - Pacific Ale Yeast July 2017	Ale	Liquid	1000 ml	dextera