

One Perfect Sunrise

- Gravity **20.3 BLG**
- ABV ---
- IBU **70**
- SRM **16.4**
- Style **Red IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28.25 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **71.9C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **-11.8 liter(s)** of **76C** water

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg	81 %	2.8
Grain	Red X	4.15 kg	77 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Chinook	25 g	120 min	11 %
Boil	Chinook	60 g	20 min	11 %
Boil	Pacific Gem	20 g	15 min	14.6 %
Boil	Pacifica	20 g	5 min	5.5 %
Aroma (end of boil)	Pacific Gem	30 g	0 min	14.6 %
Aroma (end of boil)	Pacifica	80 g	0 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP041 - Pacific Ale Yeast	Ale	Slant	300 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Other	Pożywka	2 g	Boil	1 min