

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 |