

Panna Maria, TX

- Gravity **14.3 BLG**
- ABV ---
- IBU **58**
- SRM **5.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **50 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **50 min** at **62C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|-----|
| Grain | Pale Ale Flagon | 5 kg (90.9%) | 80 % | 5 |
| Grain | Briess - 2 Row Carapils Malt | 0.5 kg (9.1%) | 75 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|----------|------------|
| Boil | Simcoe | 40 g | 50 min | 13.2 % |
| Aroma (end of boil) | Simcoe | 15 g | 5 min | 13.2 % |
| Dry Hop | Pacifica (NZ) | 15 g | 7 day(s) | 4.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11.5 g | fermentis |