

GrillAPA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **37**
- SRM **4.3**
- Style **American Pale Ale**

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 **4 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **29.5 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **65 C**, Time **10 min**
- Temp **68 C**, Time **10 min**
- Temp **70 C**, Time **10 min**

Mash step by step

- Heat up **23.6 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **10 min** at **65C**
- Keep mash **10 min** at **68C**
- Keep mash **10 min** at **70C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (84.7%) | 80 % | 5 |
| Grain | Rice, Flaked | 0.9 kg (15.3%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|----------|------------|
| Boil | Vic Secret | 20 g | 60 min | 16.3 % |
| Aroma (end of boil) | Nelson Sauvín | 20 g | 5 min | 11 % |
| Dry Hop | Vic Secret | 30 g | 7 day(s) | 16.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|--------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Liquid | 50 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------|--------|-----------|----------|
| Flavor | pulpa ananasowa | 1000 g | Secondary | 9 day(s) |