

PACIFIC APA #39

- Gravity **11.4 BLG**
- ABV ---
- IBU **45**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **78.6 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|--------------|--------|-----|
| Grain | Weyermann - pale ale | 4.5 kg (90%) | 79 % | 6.5 |
| Grain | Weyermann - Carapils | 0.25 kg (5%) | 75 % | 4 |
| Grain | Bestmalz - pszeniczny | 0.1 kg (2%) | 82 % | 4 |
| Grain | Viking - rye malt | 0.1 kg (2%) | 81 % | 8 |
| Grain | Fawcett - Crystal | 0.05 kg (1%) | 73.5 % | 160 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Topaz | 6 g | 60 min | 15.5 % |
| Boil | Topaz | 8 g | 20 min | 15.5 % |
| Boil | Mosaic | 8 g | 20 min | 12 % |
| Boil | Galaxy | 8 g | 20 min | 14.5 % |
| Aroma (end of boil) | Cascade | 20 g | 7 min | 7.1 % |
| Aroma (end of boil) | Mosaic | 15 g | 7 min | 12 % |
| Aroma (end of boil) | Galaxy | 15 g | 7 min | 14.5 % |

| | | | | |
|---------|---------|------|----------|--------|
| Dry Hop | Mosaic | 40 g | 4 day(s) | 12 % |
| Dry Hop | Galaxy | 20 g | 4 day(s) | 14.5 % |
| Dry Hop | Cascade | 20 g | 4 day(s) | 7.1 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 120 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------------|--------|---------|-------|
| Water Agent | kwas mlekowy 80% [ml] | 4.4 g | Mash | --- |
| Water Agent | gips piwowarski | 4 g | Mash | --- |
| Water Agent | chlorek wapnia [ml] | 3.43 g | Mash | --- |
| Fining | mech irlandzki | 3 g | Boil | 7 min |

Notes

- chmiele na 20" i 7" dodane do whirlpoola (98-74C), realnie IBU ok 45
Mar 12, 2017, 7:43 PM