

## Tropical APA

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- Gravity **10.4 BLG**
- ABV ---
- IBU **28**
- SRM **4.7**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **15 %**
- Size with trub loss **34.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **39.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **27.9 liter(s)** of **76C** water or to achieve **39.7 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale           | 4.9 kg (83.1%) | 79 %  | 6   |
| Grain | Briess - Carapils Malt      | 0.3 kg (5.1%)  | 74 %  | 3   |
| Grain | Oats, Malted                | 0.5 kg (8.5%)  | 80 %  | 2   |
| Grain | Strzegom Monachijski typ II | 0.2 kg (3.4%)  | 79 %  | 22  |

### Hops

| Use for | Name              | Amount | Time      | Alpha acid |
|---------|-------------------|--------|-----------|------------|
| Boil    | Amarillo          | 20 g   | 60 min    | 9.5 %      |
| Boil    | Amarillo          | 10 g   | 15 min    | 10 %       |
| Boil    | Mandarina Bavaria | 15 g   | 15 min    | 10 %       |
| Boil    | Mandarina Bavaria | 20 g   | 5 min     | 10 %       |
| Dry Hop | Mandarina Bavaria | 100 g  | 10 day(s) | 10 %       |

### Yeasts

| Name                     | Type | Form   | Amount | Laboratory  |
|--------------------------|------|--------|--------|-------------|
| Wyeast - Forbidden Fruit | Ale  | Liquid | 35 ml  | Wyeast Labs |

## Extras

| Type  | Name               | Amount | Use for | Time   |
|-------|--------------------|--------|---------|--------|
| Other | suszone kiwi       | 100 g  | Boil    | 15 min |
| Other | suszona mandarynka | 100 g  | Boil    | 15 min |
| Other | suszona pomarańcza | 100 g  | Boil    | 15 min |
| Other | suszony ananas     | 150 g  | Boil    | 15 min |
| Other | skórka pomarańczy  | 30 g   | Boil    | 10 min |
| Other | skórka ,mandarynki | 30 g   | Boil    | 10 min |
| Other | skórka cytryny     | 15 g   | Boil    | 10 min |