

## Dupaningan 7

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- Gravity **12.9 BLG**
- ABV ---
- IBU **39**
- SRM **9.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **50 min**
- Evaporation rate **10 %/h**
- Boil size **21.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

### Fermentables

| Type  | Name        | Amount       | Yield | EBC |
|-------|-------------|--------------|-------|-----|
| Grain | Pale Ale    | 3.8 kg (95%) | 80 %  | 4   |
| Grain | Crystal 200 | 0.2 kg (5%)  | 80 %  | 200 |

### Hops

| Use for | Name        | Amount | Time     | Alpha acid |
|---------|-------------|--------|----------|------------|
| Boil    | Equinox     | 15 g   | 60 min   | 13.1 %     |
| Boil    | Sorachi Ace | 20 g   | 5 min    | 10 %       |
| Boil    | Citra       | 5 g    | 0 min    | 12 %       |
| Dry Hop | Sorachi Ace | 30 g   | 7 day(s) | 10 %       |
| Boil    | cascade     | 15 g   | 15 min   | 6 %        |

### Yeasts

| Name               | Type | Form | Amount | Laboratory |
|--------------------|------|------|--------|------------|
| Mauribrew Ale Y514 | Ale  | Dry  | 12.5 g | Mauribrew  |