

# Warka 17

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **30**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **55 liter(s)**
- Trub loss **5 %**
- Size with trub loss **60.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **68.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **51 liter(s)**
- Total mash volume **68 liter(s)**

## Steps

- Temp **63 C**, Time **20 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **51 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **30 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **34.3 liter(s)** of **76C** water or to achieve **68.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount       | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 17 kg (100%) | 80 %  | 5   |

## Hops

| Use for   | Name          | Amount | Time     | Alpha acid |
|-----------|---------------|--------|----------|------------|
| Boil      | Denali        | 50 g   | 20 min   | 14 %       |
| Whirlpool | Denali        | 100 g  | 20 min   | 14 %       |
| Dry Hop   | Nelson Sauvín | 300 g  | 3 day(s) | 11 %       |

## Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| WLP090 - San Diego Super Yeast | Ale  | Slant | 250 ml | White Labs |