

# Tomahawk ipa

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **72**
- SRM **5.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount      | Yield | EBC |
|-------|------------------------|-------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (100%) | 80 %  | 7   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 38 g   | 60 min   | 15.5 %     |
| Aroma (end of boil) | Crystal                | 25 g   | 5 min    | 4.5 %      |
| Dry Hop             | Columbus/Tomahawk/Zeus | 25 g   | 2 day(s) | 15.5 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Veridan ipa | Ale  | Dry  | 11 g   | Lallemand  |

## Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | Irish moss | 5 g    | Boil    | 15 min |