

# Cold IPA

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **38**
- SRM **3.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **12 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **38.2 liter(s)**

## Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **63 C**, Time **55 min**
- Temp **72 C**, Time **25 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **55 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **26.8 liter(s)** of **76C** water or to achieve **38.2 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield  | EBC |
|-------|---------------------|----------------|--------|-----|
| Grain | Viking Pilsner malt | 4.8 kg (84.2%) | 82 %   | 4   |
| Grain | Rye, Flaked         | 0.9 kg (15.8%) | 78.3 % | 4   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 30 g   | 90 min | 15.5 %     |

## Yeasts

| Name   | Type  | Form  | Amount | Laboratory |
|--------|-------|-------|--------|------------|
| W34/70 | Lager | Slant | 500 ml | ---        |

## Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Water Agent | Kwas fosforowy | 3 g    | Mash    | 90 min |