

# ipa

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- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **45**
- SRM **7.3**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5.5 kg (78.6%) | 80 %  | 5   |
| Grain | Carahell             | 1.5 kg (21.4%) | 77 %  | 26  |

## Hops

| Use for             | Name   | Amount | Time     | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil                | Nugget | 30 g   | 60 min   | 13.8 %     |
| Boil                | Nugget | 10 g   | 15 min   | 13.8 %     |
| Aroma (end of boil) | Nugget | 20 g   | 1 min    | 13.8 %     |
| Dry Hop             | Nugget | 30 g   | 3 day(s) | 13.8 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us05 | Ale  | Dry  | 11.5 g | ---        |