

# IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **69**
- SRM **8.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **88.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.9 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **77C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

| Type  | Name                    | Amount         | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt    | 4 kg (69.9%)   | 80 %  | 5   |
| Grain | Viking Wheat Malt       | 0.5 kg (8.7%)  | 83 %  | 5   |
| Grain | Abbey Malt<br>Weyermann | 0.22 kg (3.8%) | 75 %  | 45  |
| Grain | Viking<br>melanoidynowy | 1 kg (17.5%)   | 75 %  | 60  |

## Hops

| Use for | Name         | Amount | Time   | Alpha acid |
|---------|--------------|--------|--------|------------|
| Boil    | Mosaic       | 30 g   | 60 min | 10 %       |
| Boil    | Pacific Jade | 10 g   | 60 min | 13.4 %     |
| Boil    | Green Bullet | 50 g   | 15 min | 12.7 %     |
| Boil    | Taiheke      | 50 g   | 0 min  | 7.6 %      |
| Boil    | Pacific Jade | 40 g   | 0 min  | 13.4 %     |

## Yeasts

| Name                        | Type | Form   | Amount | Laboratory       |
|-----------------------------|------|--------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Liquid | 200 ml | Fermentum Mobile |