

# Hazy IPA (mango/earl grey/nectaron)

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **29**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.3 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **35 liter(s)**

## Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **25 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **26.3 liter(s)** of **76C** water or to achieve **41.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount     | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Pilsner malt  | 6 kg (60%) | 82 %  | 4   |
| Grain | Pszeniczny           | 2 kg (20%) | 85 %  | 4   |
| Grain | Słód owsiany Fawcett | 1 kg (10%) | 61 %  | 5   |
| Grain | Płatki owsiane       | 1 kg (10%) | 60 %  | 3   |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Zula     | 40 g   | 15 min | 13.3 %     |
| Aroma (end of boil) | Nectaron | 30 g   | 10 min | 9.9 %      |
| Aroma (end of boil) | Galaxy   | 30 g   | 5 min  | 17.4 %     |
| Whirlpool           | Nectaron | 20 g   | 0 min  | 9.9 %      |
| Whirlpool           | Galaxy   | 20 g   | 0 min  | 17.4 %     |
| Whirlpool           | Zula     | 10 g   | 0 min  | 13.3 %     |

## Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM55 Zielone Wzgórze | Ale  | Liquid | 500 ml | Fermentum Mobile |

## Extras

| Type   | Name    | Amount | Use for | Time   |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 1000 g | Boil    | 15 min |