

# hazy mango

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **94**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

## Steps

- Temp **63 C**, Time **45 min**
- Temp **71 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **30 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

## Fermentables

| Type    | Name              | Amount         | Yield  | EBC |
|---------|-------------------|----------------|--------|-----|
| Grain   | Maris Otter Crisp | 1.5 kg (42.9%) | 83 %   | 6   |
| Grain   | Pszeniczny        | 1 kg (28.6%)   | 85 %   | 4   |
| Grain   | Rye, Flaked       | 0.4 kg (11.4%) | 78.3 % | 4   |
| Grain   | Płatki orkiszowe  | 0.4 kg (11.4%) | 60 %   | 4   |
| Adjunct | Rice Hulls        | 0.2 kg (5.7%)  | 1 %    | 1   |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | Sabro       | 5 g    | 60 min | 14.5 %     |
| Boil                | Sabro       | 5 g    | 30 min | 14.5 %     |
| Aroma (end of boil) | Sorachi Ace | 5 g    | 10 min | 11.9 %     |
| Whirlpool           | Mosaic      | 30 g   | 30 min | 10 %       |
| Whirlpool           | Sabro       | 40 g   | 30 min | 14.5 %     |
| Whirlpool           | Sorachi Ace | 20 g   | 30 min | 11.9 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                                |     |     |      |                 |
|--------------------------------|-----|-----|------|-----------------|
| Mangrove Jack's M12 Voss Kveik | Ale | Dry | 10 g | Mangrove Jack's |
|--------------------------------|-----|-----|------|-----------------|

### Extras

| Type   | Name        | Amount | Use for | Time     |
|--------|-------------|--------|---------|----------|
| Flavor | mango pulpa | 850 g  | Primary | 5 day(s) |

### Notes

- obnizenie ph za pomoca kwasu mlekowego ok.5ml,kwasek cytrynowy jako przeciwutleniacz ok.2g.  
*Dec 26, 2021, 4:48 PM*