

Milkshake Mango IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **11**
- SRM **4.7**
- Style **American 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 **3.2 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 4.5 kg (69.2%) | 81 % | 5 |
| Grain | Castle Malting owsiany | 1 kg (15.4%) | 85 % | 5 |
| Grain | Płatki owsiane | 0.5 kg (7.7%) | 85 % | 3 |
| Grain | płatki jęczmienne | 0.5 kg (7.7%) | 60 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|-----------|------------|
| Whirlpool | Equinox | 50 g | 10 min | 13.1 % |
| Dry Hop | Mosaic | 50 g | 18 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 500 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-------------------|--------|---------|-----------|
| Flavor | Mango | 1500 g | Primary | 18 day(s) |
| Flavor | Laktoza | 500 g | Boil | 10 min |
| Flavor | zest z pomarańczy | 200 g | Primary | 18 day(s) |