

Milkshake Mango IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **43**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 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 **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Pilzneński | 6 kg (85.7%) | 81 % | 4 |
| Grain | płatki jęczmienne | 0.5 kg (7.1%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (7.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Equinox | 30 g | 15 min | 14.1 % |
| Dry Hop | Centennial | 30 g | 5 day(s) | 9.9 % |
| Boil | Amarillo | 30 g | 60 min | 9.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------|--------|---------|-----------|
| Flavor | Mango | 4700 g | Primary | 18 day(s) |

| | | | | |
|--------|---------|--------|------|--------|
| Flavor | Laktoza | 1000 g | Boil | 10 min |
|--------|---------|--------|------|--------|