

Milkshake Mango IPA 1.5kg mango i laktoza Australia/New Zeland

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **12**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **42 liter(s)**

Steps

- Temp **48 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **31.5 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **20 min** at **48C**
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **23.3 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (47.6%) | 80 % | 5 |
| Grain | Płatki owsiane | 1 kg (9.5%) | 85 % | 3 |
| Grain | Płatki pszeniczne | 1 kg (9.5%) | 85 % | 3 |
| Grain | Pilzneński | 3.5 kg (33.3%) | 81 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Wai-iti | 100 g | 50 min | 2.2 % |
| Dry Hop | Wai-iti | 100 g | 7 day(s) | 2.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| m66 | Ale | Dry | 21 g | mangrove jack |
| FM55 Zielone Wzgórze | Ale | Liquid | 30 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|-----------|----------|
| Flavor | Laktoza | 500 g | Boil | 10 min |
| Flavor | Mango | 2400 g | Secondary | 7 day(s) |