

Milkshake IPA z mango

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **32**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **20.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 4 kg (65%) | 81 % | 4 |
| Grain | Płatki pszeniczne | 1 kg (16.3%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.6 kg (9.8%) | 85 % | 3 |
| Grain | Strzegom Monachijski typ II | 0.3 kg (4.9%) | 79 % | 22 |
| Sugar | Laktoza | 0.25 kg (4.1%) | 100 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Equinox | 25 g | 60 min | 12.8 % |
| Aroma (end of boil) | Equinox | 50 g | 1 min | 12.8 % |
| Dry Hop | Mosaic | 50 g | 2 day(s) | 10.4 % |
| Dry Hop | Equinox | 25 g | 2 day(s) | 12.8 % |

Yeasts

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

| | | | | |
|----------------------|-----|--------|--------|------------------|
| FM55 Zielone Wzgórze | Ale | Liquid | 120 ml | Fermentum Mobile |
|----------------------|-----|--------|--------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------------|--------|----------|----------|
| Other | Laktoza | 250 g | Boil | 10 min |
| Flavor | Pulpa z mango | 1700 g | Primary | 7 day(s) |
| Water Agent | Gips piwowarski | 5 g | Mash | 50 min |
| Other | Kwas askorbinowy | 4 g | Bottling | --- |

Notes

- <http://blog.homebrewing.pl/milkshake-ipa-z-mango-i-czarna-porzeczka-receptura/>
Dec 16, 2019, 8:34 PM