

Mango Milkshake IPA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **50**
- SRM **3.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **77 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **51 liter(s)** of **76C** water or to achieve **77 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|---------------|-------|-----|
| Grain | Pilznieński | 12 kg (92.3%) | 81 % | 4 |
| Grain | Żytni | 1 kg (7.7%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 60 g | 60 min | 14.6 % |
| Boil | Columbus/Tomahawk/Zeus | 40 g | 30 min | 14.6 % |
| Dry Hop | Mosaic | 50 g | 7 day(s) | 10 % |
| Dry Hop | Simcoe | 100 g | 7 day(s) | 13.2 % |
| Dry Hop | Citra | 100 g | 7 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale | Dry | 20.63 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|-----------|----------|
| Flavor | Mango puree | 4500 g | Secondary | 7 day(s) |