

Bez Pale Ale z Mango

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **63**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (83.3%) | 79 % | 6 |
| Grain | Strzegom Pszeniczny | 1 kg (16.7%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Chinook | 50 g | 60 min | 13 % |
| Boil | Cascade | 20 g | 20 min | 6 % |
| Dry Hop | Chinook | 50 g | 7 day(s) | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|-----------|----------|
| Flavor | Mango - pulpa | 1700 g | Secondary | 7 day(s) |