

# Milkshake Mango APA 17.02.2022 r.

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **3.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount          | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Simpsons Extra Pale Ale    | 4.17 kg (66.7%) | 80 %  | 4   |
| Grain | Weyermann Light Wheat Malt | 2.08 kg (33.3%) | 80 %  | 5   |

## Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|---|----------|--------|--------|------------|
| Boil  | Chinook  | 40 g   | 15 min | 10 %       |
| Whirlpool   | Mackinac | 62.5 g | 0 min  | 10 %       |
| hop stand - wsypać 10 min po wyłączeniu palnika, już podczas chłodzenia (od 80st.C) |          |        |        |            |
| Whirlpool   | Azacca   | 62.5 g | 15 min | 14 %       |
| hop stand - wsypać 10 min po wyłączeniu palnika, już podczas chłodzenia (od 80st.C) |          |        |        |            |

## Yeasts

| Name         | Type | Form | Amount  | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale  | Dry  | 23.96 g | Fermentis  |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|   |              |          |           |          |
|---|--------------|----------|-----------|----------|
| Flavor  | Mango Alonso | 1875 g   | Secondary | 7 day(s) |
| w 3 dniu burzliwej bezpośrednio do fermentora   |              |          |           |          |
| Other   | Laktoza      | 416.67 g | Boil      | 15 min   |
| Podczas gotowania, na ostatnie 15minut. Wcześniej odebrać 1l gotującej się brzeczki i rozpuścić w niej laktozę. |              |          |           |          |