

# Wa-MilkshakeIPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **22**
- SRM **7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.9 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (77.2%)   | 80 %  | 5   |
| Grain | Biscuit Malt         | 0.3 kg (4.6%)  | 79 %  | 50  |
| Grain | Pszeniczny Bestmalz  | 0.28 kg (4.3%) | 82 %  | 5   |
| Grain | Strzegom Karmel 150  | 0.2 kg (3.1%)  | 75 %  | 150 |
| Grain | Płatki owsiane       | 0.7 kg (10.8%) | 60 %  | 3   |

## Hops

| Use for               | Name   | Amount | Time     | Alpha acid |
|-----------------------|--------|--------|----------|------------|
| Boil                  | Galaxy | 10 g   | 60 min   | 15 %       |
| Whirlpool             | Galaxy | 20 g   | 10 min   | 15 %       |
| Po wyłączeniu palnika |        |        |          |            |
| Whirlpool             | Mosaic | 20 g   | 10 min   | 10 %       |
| Po wyłączeniu palnika |        |        |          |            |
| Dry Hop               | Galaxy | 20 g   | 5 day(s) | 15 %       |
| Dry Hop               | Mosaic | 30 g   | 5 day(s) | 10 %       |

## Yeasts

| Name                              | Type | Form  | Amount | Laboratory  |
|-----------------------------------|------|-------|--------|-------------|
| Wyeast - 1762<br>Belgian Abbey II | Ale  | Slant | 400 ml | Wyeast Labs |

### Extras

| Type   | Name            | Amount | Use for   | Time     |
|--|-----------------|--------|-----------|----------|
| Other  | Laktoza         | 650 g  | Boil      | 10 min   |
| Flavor   | Płatki kokosowe | 400 g  | Secondary | 5 day(s) |
| Prażone w piekarniku przez 10-15min, dodane do piwa w hop-tube'ie. |                 |        |           |          |
| Flavor   | Wanilia         | 4 g    | Secondary | 5 day(s) |
| Cztery laski wanilii macerowane w whisky przez co najmniej tydzień |                 |        |           |          |
| Other  | Mech irlandzki  | 5 g    | Boil      | 10 min   |