

# Milkshake IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **38**
- SRM **4.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield  | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (75%)  | 80 %   | 5   |
| Grain | Strzegom Wiedeński   | 0.2 kg (3.3%) | 79 %   | 10  |
| Grain | Pszeniczny           | 0.2 kg (3.3%) | 85 %   | 4   |
| Grain | Carahell             | 0.1 kg (1.7%) | 77 %   | 26  |
| Grain | Płatki owsiane       | 0.5 kg (8.3%) | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (8.3%) | 76.1 % | 0   |

## Hops

| Use for             | Name  | Amount | Time     | Alpha acid |
|---------------------|-------|--------|----------|------------|
| Boil                | Citra | 20 g   | 60 min   | 12 %       |
| Boil                | Citra | 10 g   | 30 min   | 12 %       |
| Boil                | Citra | 5 g    | 15 min   | 12 %       |
| Boil                | Citra | 10 g   | 5 min    | 12 %       |
| Aroma (end of boil) | Citra | 5 g    | 0 min    | 12 %       |
| Dry Hop             | Citra | 15 g   | 7 day(s) | 12 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                          |     |     |      |     |
|--------------------------|-----|-----|------|-----|
| Gozdawa Pure Ale Yeast 7 | Ale | Dry | 10 g | --- |
|--------------------------|-----|-----|------|-----|

### Extras

| Type  | Name                 | Amount | Use for | Time   |
|-------|----------------------|--------|---------|--------|
| Other | Milk Sugar (Lactose) | 500 g  | Boil    | 15 min |