

# Milkshake IPA

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **42**
- SRM **4.4**
- Style **American IPA**

## 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 **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **29.7 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **0 min** at **78C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (68.2%) | 80 %  | 5   |
| Grain | Pszeniczny           | 1 kg (15.2%)   | 85 %  | 4   |
| Grain | Płatki owsiane       | 1 kg (15.2%)   | 85 %  | 3   |
| Grain | Colorado Honing Malt | 0.1 kg (1.5%)  | 80 %  | 10  |

## Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Chinook | 25 g   | 60 min   | 13 %       |
| Boil    | Chinook | 25 g   | 10 min   | 13 %       |
| Boil    | Mosaic  | 10 g   | 5 min    | 10 %       |
| Boil    | Citra   | 10 g   | 3 min    | 12 %       |
| Dry Hop | Mosaic  | 80 g   | 7 day(s) | 10 %       |
| Dry Hop | Citra   | 80 g   | 7 day(s) | 12 %       |
| Dry Hop | Chinook | 40 g   | 7 day(s) | 13 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 6.5 g  | ---        |

## Extras

| Type   | Name              | Amount | Use for | Time   |
|--------|-------------------|--------|---------|--------|
| Flavor | Laktoza           | 250 g  | Boil    | 60 min |
| Flavor | Zest z Pomarańczy | 150 g  | Boil    | 5 min  |
| Flavor | Zest z Grejfruta  | 80 g   | Boil    | 5 min  |

## Notes

- Fermentacja w 18 stopniach. Schłodzić brzeczkę do 16 stopni przed zadaniem drożdży. Utrzymywać 18 przez 5 dni, dwa ostatnie dni podnieść temperaturę na 20 stopni. Wysładzamy nie dłużej niż do 2BLG!  
*Aug 7, 2017, 4:38 PM*