

Milkshake IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **4.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **32.4 liter(s)**
- Total mash volume **43.2 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **32.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **29 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Strzegom Pale Ale | 8.5 kg (72%) | 79 % | 6 |
| Grain | Wheat, Torrified | 0.3 kg (2.5%) | 79 % | 4 |
| Grain | Słód owsiany Fawcett | 1 kg (8.5%) | 61 % | 5 |
| Grain | BESTMALZ - Best Wheat Malt | 0.5 kg (4.2%) | 82 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (4.2%) | 85 % | 3 |
| Sugar | Milk Sugar (Lactose) | 1 kg (8.5%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | Citra | 30 g | 45 min | 12 % |
| Aroma (end of boil) | Citra | 20 g | 15 min | 12 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |
| Whirlpool | Citra | 20 g | 20 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 500 ml | Fermentum Mobile |