

Lab #1 - IPA Mleczna

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **36**
- SRM **5.2**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **40 min**
- Evaporation rate **19 %/h**
- Boil size **14.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **14.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | viking golden ale | 1 kg (29.4%) | 80 % | 12 |
| Grain | Strzegom Pszeniczny | 0.5 kg (14.7%) | 81 % | 6 |
| Grain | Strzegom Pilzneński | 1 kg (29.4%) | 80 % | 4 |
| Grain | Płatki pszeniczne | 0.5 kg (14.7%) | 60 % | 3 |
| Sugar | Milk Sugar (Lactose) | 0.4 kg (11.8%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------|--------|----------|------------|
| Boil | Enigma (AUS) | 20 g | 10 min | 16.3 % |
| Whirlpool | Calypso | 30 g | 10 min | 14.9 % |
| Dry Hop | Calypso | 70 g | 7 day(s) | 14.9 % |
| Dry Hop | Enigma (AUS) | 80 g | 4 day(s) | 16.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |