

#? Milkshake Raspberry APA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

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

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------|-----------------|-------|-----|
| Grain | Pale Ale | 3.2 kg (58.7%) | 80 % | 5 |
| Grain | Pszeniczny | 0.6 kg (11%) | 85 % | 4 |
| Grain | Cara Blonde | 0.2 kg (3.7%) | 78 % | 20 |
| Grain | Płatki owsiane | 0.8 kg (14.7%) | 60 % | 3 |
| Sugar | laktoza | 0.65 kg (11.9%) | 60 % | 1 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 12 % |
| Aroma (end of boil) | Enigma (AUS) | 25 g | 5 min | 17.2 % |
| Whirlpool | Enigma (AUS) | 25 g | 0 min | 17.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale | Dry | 11 g | SafAle |

Extras

| Type | Name | Amount | Use for | Time |
|--------|--------|--------|-----------|-----------|
| Flavor | Maliny | 1200 g | Secondary | 15 day(s) |