

## #? 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) |