

Raspberry Milkshake

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **29**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **76.5 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **24.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Weyermann - Pale Ale | 4.8 kg (83.3%) | 80 % | 6 |
| Sugar | Milk Sugar (Lactose) | 0.4 kg (6.9%) | 76.1 % | 0 |
| Grain | Płatki owsiane | 0.56 kg (9.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Nugget | 23.2 g | 60 min | 13 % |
| Whirlpool | Cluster | 20 g | 0 min | 7.75 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale | Dry | 20.91 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|-----------|----------|
| Flavor | Laktoza | 400 g | Boil | 0 min |
| Flavor | Malina grys | 3000 g | Secondary | 7 day(s) |