

APA Milkshake z Yuzu

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (60%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 1 kg (20%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 1 kg (20%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Calypso | 15 g | 60 min | 14.7 % |
| Aroma (end of boil) | Citra | 20 g | 1 min | 12.9 % |
| Whirlpool | Citra | 30 g | 10 min | 12.9 % |
| Whirlpool | Rakau (NZ) | 20 g | 10 min | 8.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|---------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 1000 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 1500 g | Boil | 50 min |

| | | | | |
|--------|----------------------------|--------|-----------|----------|
| Flavor | Skórka słodkiej pomarańczy | 20 g | Boil | 15 min |
| Flavor | Curacao | 20 g | Boil | 15 min |
| Flavor | Trawa cytrynowa | 10 g | Boil | 15 min |
| Flavor | Werbena cytrynowa | 10 g | Boil | 15 min |
| Flavor | Puree z yuzu | 1290 g | Secondary | 7 day(s) |