

"waicen" ulka

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **9**
- SRM **4.2**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **51 C**, Time **15 min**
- Temp **54 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **68 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **51C**
- Keep mash **10 min** at **54C**
- Keep mash **20 min** at **63C**
- Keep mash **15 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **22.3 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3 kg (49.1%) | 81 % | 5 |
| Grain | Strzegom Pszeniczny | 3 kg (49.1%) | 81 % | 6 |
| Grain | Monachijski | 0.11 kg (1.8%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Hallertau | 25 g | 90 min | 3.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 150 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|---------------|----------------|-------------|
| Other | marakuja | 1500 g | Secondary | 14 day(s) |
| Other | mango | 500 g | Secondary | 14 day(s) |