

## Wa-Grapefruit 4.0

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **9**
- SRM **4.7**
- Style **Weizen/Weissbier**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **24.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **12.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Pszeniczny          | 2.5 kg (61%)   | 85 %  | 4   |
| Grain | Pilzneński          | 1.5 kg (36.6%) | 81 %  | 4   |
| Grain | Strzegom Karmel 150 | 0.1 kg (2.4%)  | 75 %  | 150 |

### Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Callista | 15 g   | 40 min | 4 %        |
| Boil                | Callista | 10 g   | 20 min | 4 %        |
| Aroma (end of boil) | Callista | 15 g   | 0 min  | 4 %        |

### Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M20 Bavarian Wheat | Wheat | Dry  | 11.5 g | Mangrove Jack's |

### Extras

| Type   | Name     | Amount | Use for | Time   |
|--------|----------|--------|---------|--------|
| Flavor | Ksylitol | 250 g  | Boil    | 10 min |

|        |                         |        |         |           |
|--------|-------------------------|--------|---------|-----------|
| Flavor | Koncentrat grejpfrutowy | 2000 g | Primary | 10 day(s) |
| Other  | Woda                    | 3000 g | Primary | 10 day(s) |

## Notes

- Po wysładzaniu, zagotować brzeczkę przez 15min (bez chmielu i dodatków) i ostudzić do temperatury ok. 40 st. C. Dodać Lactobactillus Plantarum (wysypać zawartość ok. 15-20 tabletek), szczelnie zamknąć, owijając pokrywkę folią spożywczą i zaizolować. Garnek odstawić na 48h. Dopiero po tym procesie przejść do normalnego nachmielania i fermentacji.

*Feb 13, 2022, 7:17 PM*