

PanilPan

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **40**
- SRM **5.3**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **69 C**, Time **90 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **90 min** at **69C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------------|----------------|--------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (54.3%) | 85 % | 7 |
| Grain | Pszeniczny | 1.4 kg (21.7%) | 85 % | 4 |
| Grain | Acid Malt | 0.05 kg (0.8%) | 58.7 % | 6 |
| Adjunct | Płatki pszeniczne | 0.5 kg (7.8%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (7.8%) | 85 % | 3 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (7.8%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Citra | 30 g | 40 min | 13.3 % |
| Aroma (end of boil) | Perle (PL) | 30 g | 10 min | 7 % |
| Aroma (end of boil) | Perle | 20 g | 5 min | 7 % |
| Whirlpool | Cascade | 50 g | 0 min | 7.3 % |
| Whirlpool | Mosaic | 20 g | 0 min | 12.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 140 ml | Fermentum Mobile |