

PIPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **4.5**
- 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 **5 %/h**
- Boil size **23.1 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 2 kg (31.3%) | 80 % | 4 |
| Grain | Słód pszeniczny Bestmalz | 2 kg (31.3%) | 82 % | 5 |
| Grain | Płatki pszeniczne | 1.8 kg (28.1%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.6 kg (9.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------|--------|----------|------------|
| Boil | Magnum | 12 g | 60 min | 14 % |
| Boil | Citra | 12 g | 30 min | 14.2 % |
| Boil | Mosaic | 20 g | 15 min | 11.8 % |
| Boil | Cascade | 20 g | 1 min | 5.5 % |
| Boil | Pacific Jade | 10 g | 1 min | 12.4 % |
| Dry Hop | Citra | 20 g | 7 day(s) | 14.2 % |
| Dry Hop | Pacific Jade | 10 g | 7 day(s) | 12.4 % |
| Dry Hop | Cascade | 10 g | 7 day(s) | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|--------|------------------|
| FM26 Belgijskie Pagórki | Ale | Liquid | 30 ml | Fermentum Mobile |