

Hopfest PA2

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|-----------------|--------|-----|
| Grain | Strzegom Pale Ale | 3.9 kg (71.6%) | 79 % | 6 |
| Grain | Płatki owsiane | 0.4 kg (7.3%) | 85 % | 3 |
| Grain | Rye, Flaked | 0.75 kg (13.8%) | 78.3 % | 4 |
| Grain | Barley, Flaked | 0.4 kg (7.3%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Citra | 28 g | 30 min | 13.5 % |
| Boil | Chinook pl | 28 g | 10 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|-------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Slant | 50 ml | Mangrove Jack's |