

pipa

- Gravity **16 BLG**
- ABV ---
- IBU **77**
- SRM **6.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **19.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **19.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 4.5 kg (100%) | 79 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Warrior | 25 g | 60 min | 15.5 % |
| Boil | Marynka | 25 g | 15 min | 10 % |
| Boil | Sybilla | 25 g | 15 min | 3.5 % |
| Boil | Marynka | 20 g | 0 min | 10 % |
| Boil | Sybilla | 20 g | 0 min | 3.5 % |
| Dry Hop | Marynka | 30 g | 4 day(s) | 10 % |
| Dry Hop | Sybilla | 30 g | 4 day(s) | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |