

Wolność Tomku w swoim domku vol.1

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **29**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (74.1%) | 80 % | 5 |
| Grain | Płatki owsiane | 0.5 kg (9.3%) | 60 % | 3 |
| Grain | Amber Malt | 0.15 kg (2.8%) | 75 % | 43 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (9.3%) | 79 % | 16 |
| Grain | Strzegom Karmel 30 | 0.25 kg (4.6%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|--------|------------|
| Boil | Fuggles | 15 g | 60 min | 4.5 % |
| Boil | Magnum | 40 g | 10 min | 13.5 % |
| Aroma (end of boil) | Cascade | 25 g | 1 min | 6 % |
| Aroma (end of boil) | Pacifica (NZ) | 30 g | 1 min | 4.8 % |
| Aroma (end of boil) | Amarillo | 25 g | 1 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 10 g | Boil | 15 min |
| Flavor | Cytryna skórki | 20 g | Boil | 10 min |