

# 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 |