

Urodzinowa APA Mani

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **36**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **25.2 liter(s)**
- Total mash volume **30.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **25.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **2.6 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 5.04 kg (100%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | lunga | 18 g | 60 min | 11 % |
| Boil | Cascade PL | 8.4 g | 30 min | 5.5 % |
| Boil | Citra | 6 g | 15 min | 12 % |
| Boil | Mosaic | 6 g | 15 min | 12 % |
| Dry Hop | Citra | 24 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 84 g | Fermentis |