

# Urodzinowa APA Mani

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- 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  |