

Moja APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **41**
- SRM **6.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **45 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2 kg (37.7%) | 80 % | 3 |
| Grain | Strzegom Monachijski typ I | 3.3 kg (62.3%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | Amarillo | 20 g | 60 min | 9.5 % |
| Boil | Marynka | 15 g | 60 min | 10 % |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g | 10 min | 4 % |
| Dry Hop | Marynka | 35 g | 7 day(s) | 10 % |

Yeasts

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