

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