APA Mandarina

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **56**
- SRM **4.3**
- Style **American Pale Ale**

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 **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7 kg *(100%)*	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	30 g	60 min	10 %
Boil	Mandarina Bavaria	35 g	30 min	10 %
Boil	Mandarina Bavaria	35 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	12 g	fermentis

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.