Mandaryna Pale Ale

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **55**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 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 **68 C**, Time **70 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg *(56.6%)*	81 %	4
Grain	Viking Pale Ale malt	1.9 kg *(35.8%)*	80 %	5
Grain	Caramel/Crystal Malt - 30L	0.4 kg *(7.5%)*	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	13 g	70 min	13.5 %
Boil	Mandarina Bavaria	25 g	15 min	10 %
Boil	Mandarina Bavaria	50 g	10 min	10 %
Boil	Mandarina Bavaria	50 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	13.75 g	fermentis

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