WAWER IPA

- Gravity **15 BLG**
- ABV **---**
- IBU **43**
- SRM **4.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **20.9 liter(s)**

Steps

- Temp **62 C**, Time **10 min**
- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.4 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **45 min** at **66C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.5 kg *(100%)*	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	45 min	13.5 %
Aroma (end of boil)	Magnum	5 g	10 min	13.5 %
Boil	Marynka	5 g	45 min	10 %
Aroma (end of boil)	Marynka	20 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

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