EPA! EPA!

- Gravity **12.7 BLG**
- ABV **---**
- IBU **46**
- SRM **7.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **58 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **64.3C**
- Add grains
- Keep mash **10 min** at **58C**
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	1 kg *(21.1%)*	81 %	8
Grain	Weyermann - Pale Ale Malt	2.5 kg *(52.6%)*	85 %	7
Grain	Weyermann - Pale Wheat Malt	1 kg *(21.1%)*	85 %	5
Grain	Weyermann - Melanoiden Malt	0.25 kg *(5.3%)*	81 %	70

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Enigma (AUS)	20 g	20 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	15 g	12 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	15 g	7 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	25 g	3 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	25 g	0 min	17.2 %
Dry Hop	Enigma (AUS)	50 g	7 day(s)	17.2 %

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

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min