MORILLO

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **28**
- SRM **5.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	2.5 kg *(59.5%)*	80 %	8
Grain	BESTMALZ - Best Pilsen	1.5 kg *(35.7%)*	80.5 %	4
Grain	Cara Body Viking Malt	0.1 kg *(2.4%)*	--- %	8
Grain	Pszeniczny Jasny Bestmalz	0.1 kg *(2.4%)*	--- %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Aroma (end of boil)	Amarillo	10 g	15 min	9.5 %
Aroma (end of boil)	Mosaic	10 g	15 min	10 %
Whirlpool	Amarillo	10 g	0 min	9.5 %
Dry Hop	Amarillo	35 g	2 day(s)	9.5 %
Whirlpool	Mosaic	10 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory

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

Mangrove Jack's M44 US West Coast	Ale	Slant	100 ml	Mangrove