

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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

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