

# Mackinac Enigma IPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **21**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt  | 2.5 kg (69.4%) | 82 %  | 4   |
| Grain | Viking Wheat Malt    | 0.5 kg (13.9%) | 83 %  | 5   |
| Grain | Weyermann - Carapils | 0.3 kg (8.3%)  | 78 %  | 4   |
| Grain | Oats, Flaked         | 0.3 kg (8.3%)  | 80 %  | 2   |

## Hops

| Use for   | Name         | Amount | Time     | Alpha acid |
|-----------|--------------|--------|----------|------------|
| Whirlpool | Mackinac     | 40 g   | 15 min   | 13 %       |
| Dry Hop   | Mackinac     | 60 g   | 3 day(s) | 13 %       |
| Dry Hop   | Enigma (AUS) | 30 g   | 3 day(s) | 18.2 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 150 g  | Fermentis  |

## Notes

- Woda RO:Kran 1:1  
Chlorek Wapnia dodany do zacierania 2ml  
Woda do wysładzania zakwaszone do 5.6Ph  
Oct 3, 2021, 9:44 AM