

Michigan Copper

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **53**
- SRM **5.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6.5 kg (100%)	85 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	80 g	60 min	7.5 %
Aroma (end of boil)	Michigan Copper	100 g	0 min	10 %
Dry Hop	Michigan Copper	100 g	2 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile