

Mad Hops

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **44**
- SRM **5.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6 kg (92.3%)	85 %	7
Grain	Weyermann - Carapils	0.5 kg (7.7%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	60 min	10 %
Boil	Mosaic	20 g	30 min	10 %
Boil	Mosaic	20 g	15 min	10 %
Aroma (end of boil)	Mosaic	10 g	5 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis