

Lady Liberty

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **43**
- SRM **7.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.3 liter(s)**

Steps

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

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (87.7%)	80 %	5
Grain	Viking Munich Malt	0.25 kg (8.8%)	78 %	18
Grain	Viking Carmel Malt 150	0.1 kg (3.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	15 g	30 min	11.2 %
Boil	Cascade	15 g	15 min	5.5 %
Aroma (end of boil)	Cascade	15 g	15 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis