

# Bitter White Lady

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **63**
- SRM **5.5**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.8 liter(s)**

## Steps

- Temp **64 C**, Time **35 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **11.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **35 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (38%)	80 %	5
Grain	Pszeniczny	1.45 kg (36.7%)	85 %	15
Grain	Grodziski pszeniczny wędzony dębem	0.5 kg (12.7%)	80 %	3
Grain	Strzegom Monachijski typ I	0.5 kg (12.7%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Ahtanum	15 g	10 min	5 %
Dry Hop	Citra	25 g	4 day(s)	12 %
Dry Hop	Ahtanum	15 g	4 day(s)	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM27 Artefakty trapistów	Ale	Liquid	50 ml	Fermentum Mobile