

## 4. ABW

- Gravity **30.2 BLG**
- ABV ---
- IBU **120**
- SRM **10.3**
- Style **American Barleywine**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **180 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.5 liter(s)**
- Total mash volume **46 liter(s)**

### Steps

- Temp **64 C**, Time **90 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **34.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	11.5 kg (100%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zeus	100 g	60 min	15 %
Boil	Zeus	50 g	15 min	15 %
Boil	Cltra	100 g	15 min	13.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale	Ale	Liquid	500 ml	Wyeast Labs