

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 |