

## #139 American Brown Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **36**
- SRM **15.2**
- Style **Northern English Brown Ale**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **4 %**
- Size with trub loss **10.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **14 %/h**
- Boil size **13.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **15.9 liter(s)**

### Steps

- Temp **67 C**, Time **35 min**
- Temp **72.5 C**, Time **45 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **35 min** at **67C**
- Keep mash **45 min** at **72.5C**
- Keep mash **5 min** at **77C**
- Sparge using **2.3 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.9 kg (77.6%)	80 %	5
Grain	Brown Malt (British Chocolate)	0.41 kg (16.7%)	70 %	128
Grain	Special W	0.14 kg (5.7%)	73 %	300

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Ekuanot	10 g	15 min	14 %
Dry Hop	Ekuanot	70 g	9 day(s)	14 %
Aroma (end of boil)	Ekuanot	30 g	5 min	14 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Slant	100 ml	Danstar

### Extras

Type	Name	Amount	Use for	Time
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Fining	WhirlFloc	1.04 g	Boil	12 min
Other	Witamina C	2 g	Secondary	9 day(s)