

American Bitter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **46**
- SRM **7.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **20.9 liter(s)**

Steps

- Temp **70 C**, Time **60 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (86%)	80 %	5
Grain	Abbey Castle	0.4 kg (8.6%)	80 %	45
Grain	Weyermann Caramunich 3	0.25 kg (5.4%)	76 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	40 g	60 min	11 %
Dry Hop	Chinook	50 g	4 day(s)	11 %

Yeasts

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