

Band of Brothers

- Gravity **12.4 BLG**
- ABV ---
- IBU **30**
- SRM **10.5**
- Style **American Amber Ale**

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 **6 %/h**
- Boil size **23.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **22.3 liter(s)**

Steps

- Temp **64 C**, Time **35 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **35 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **23.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	3.8 kg (76.8%)	78 %	6
Grain	Caramel/Crystal Malt - 10L	0.2 kg (4%)	75 %	20
Grain	Barley, Flaked	0.15 kg (3%)	70 %	4
Grain	Caramunich Malt	0.8 kg (16.2%)	--- %	110.3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	20 g	60 min	5.1 %
Boil	Mosaic	20 g	20 min	10 %
Boil	Fuggles	20 g	10 min	4.5 %
Boil	Fuggles	10 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale