

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 |